Continue



```
Download Article Download Article A literal equation is an equation is an equation that has all variables or multiple variables. To solve a literal equations, you need to solve for a determined variable by using algebra to isolate it.[1] You will often need to do this when rearranging geometric formulas or when solving linear equations. In order to solve literal equations,
use the same algebraic principles you would use to solve linear equations. 1 Determine which variable you need to isolate. Isolating a variable means getting the variable on one side of an equation by itself. This information should be given to you, or you can figure it out based on what information you know you will be given.[2] For example, you
might be told to solve the area of a triangle formula for h {\displaystyle h} . Or, you might know that you have the area and base of the triangle, so you need to solve for the desired variable. Use inverse operations to cancel
variables on one side of the equation and move them to the other side. Keep in mind the following inverse operations: Multiplication and division. Addition and subtraction and division. Addition and subtraction and division. Addition and division and subtraction and division.
your equation remains true, and in the process you are moving variables from one side to the other as needed. For example, to solve the area of a triangle formula (A = 1 2 b h {\displaystyle A={\frac {1}{2}}bh}) for h {\displaystyle A={\frac {1}}{2}}bh}) for h {\displaystyle A={\frac {1}}{2}}bh}) for h {\displaystyle A={\frac {1}}{2}}bh}
\{2\} bh \{2A\} \{b\} \{A = b \ h \ b\} \{A = b \ h \ b\} \{A = b \ b\}
form for the equation of a line. The slope-intercept form is y = m x + b {\displaystyle y} equals the y-coordinate of that same point, m {\displaystyle y} equals the y-intercept.[3] 2 Remember the
standard form of a line. The standard form is A x + B y = C \{ \text{displaystyle } A \}  are the coordinates of a point on the line, A \{ \text{displaystyle } A \}  are the coordinates of a point on the line, A \{ \text{displaystyle } A \}  is a positive integer, and B \{ \text{displaystyle } A \}  is a positive integer. [4] 3 Use algebra to isolate the appropriate variable. Use inverse
operations to move variables from one side of the equation to the other side. Remember to keep the equation of a line 3x + 2y = 4 (\displaystyle 3x + 2y = 4). This is in standard form. If you need to
find the y-intercept of the line, you need to rearrange the formula to slope-intercept form by isolating the y {\displaystyle 3x + 2y - 3x = 4 - 3x {\displaystyle } 3x + 2y - 3x = 4 - 3x {\displaystyle } 2y = 4 - 3x {
x 2 {\displaystyle {\frac {2y}{2}}} = {\frac {4-3x}{2}}} y = 4 - 3 x 2 {\displaystyle y = {\frac {4-3x}{2}}} EXPERT TIP Joseph Meyer is a High School Math Teacher based in Pittsburgh, Pennsylvania. He is an educator at City Charter High School, where he has been teaching for over 7 years. Joseph is also the founder of
Sandbox Math, an online learning community dedicated to helping students succeed in Algebra. His site is set apart by its focus on fostering genuine comprehension through step-by-step understandings and confidently take on any test they
face. He received his MA in Physics from Case Western Reserve University and his BA in Physics from Baldwin Wallace University. To solve an equation to isolate x. Use techniques like the distributive property, combining like terms, factoring, adding or subtracting the same number, and
multiplying or dividing by the same non-zero number to isolate "x" and find the answer. 4 Reorder the variables and constants, if necessary. If you are changing an equation to slope-intercept or standard form, rearrange the variables, coefficients, and constants so that they follow the correct formula.[7] For example, to change y = 4 - 3 x 2
 \{\text{displaystyle y} = -3 x + 4 2 \{\text{displ
 intercept as 2. Advertisement 1 Solve this equation for b {\displaystyle b} . R = 5 b d - 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 6 a = 
 \{R\}\{5d-6a\}\}=\{\frac{b(5d-6a)}\{5d-6a\}\}=R\ 5\ d-6\ a=b\ \{\frac{R}\{5d-6a\}\}=b\}\ 2\ Solve\ the\ circumference\ of\ a\ circle\ formula\ for\ the\ radius.
 So you need to isolate the r {\displaystyle r} to solve for the radius. Isolate the r {\displaystyle r} to solve for the equation by 2 \pi {\displaystyle {\frac {C}{2\pi }} = {\frac {C}{2\pi }} = {\frac {C}{2\pi }} = r {\displaystyle 2\pi } = {\frac {C}{2\pi }} = {\frac {C}{2\pi }} = r {\displaystyle 2\pi } = r {\displaystyle 2\pi } = {\frac {C}{2\pi }} = {\frac {C}{2\pi }} = r {\frac {
 form: r = C 2 \pi \{ c \} \}  . 3 Rewrite this equation of a line in standard form. y = 1 2 x + 5 \{ c \} \}  Recall that standard form is A x + B y = C \{ c \} \}  . 3 Rewrite this equation by 2: 2 y = 2 (1 2 x + 5) \{ c \} \}  Recall that standard form is A x + B y = C \{ c \} \} \}  Recall that standard form is A x + B y = C \{ c \} \} \}  Recall that standard form is A x + B y = C \{ c \} \} \}  Recall that standard form is A x + B y = C \{ c \} \} \}  Recall that standard form is A x + B y = C \{ c \} \} \}  Recall that standard form is A x + B y = C \{ c \} \} \}  Recall that standard form is A x + B y = C \{ c \} \} \} \}  Recall that standard form is A x + B y = C \{ c \} \} \} \}  Recall that standard form is A x + B y = C \{ c \} \} \} \} \} 
 \{2\}\}x+5)\} 2 y = x + 10 {\displaystyle 2y-x=x+10} Subtract x {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 - x {\displaystyle 2y-x=x+10} Rearrange the y {\displaystyle 2y-x=x+10} Rearrange the y {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 - x {\displaystyle 2y-x=x+10} Rearrange the y {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 - x {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 - x {\displaystyle 2y-x=x+10} Rearrange the y {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 - x {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 - x {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 - x {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 - x {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 - x {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 - x {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 - x {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 {\displaystyle 2y-x=x+10-x} 2 y - x = x + 10 {\displaystyle 2
 Multiply both sides by -1 {\displaystyle -1}, since A {\displaystyle \( A \) should be a positive integer for standard form:[9] -1 (-x + 2y) = -1 (10) {\displaystyle \( x-2y=-10 \) Advertisement Add New Question Question How do I solve 3x + w - r = y? Because you're working with four variables, you
 would need a total of four separate equations, each containing those variables, in order to find their values. Question In the equation For the equation For the equation 12am = 4, how do I solve for a? Divide both sides of the equation by 12m. See more answers Ask a
Question Advertisement Co-authored by: Texas Certified Math Teacher at Bridge Builder Academy in Plano, Texas. With over 20 years of teaching experience, he is a Texas SBEC Certified Math Teacher at Bridge Builder Academy in Plano, Texas. With over 20 years of teaching experience, he is a Texas SBEC Certified Math Teacher at Bridge Builder Academy in Plano, Texas.
has taught pre-algebra, algebra 1, geometry, algebra 2, pre-calculus, statistics, math reasoning, and math models with applications. He was a Mathematics Major at Southeastern Louisiana and he has a Bachelor of Science from The University of the State of New York (now Excelsior University) and a Master of Science in Computer Information
Systems from Boston University. This article has been viewed 96,417 times. Co-authors: 9 Updated: February 24, 2025 Views: 96,417 times. Download Article Download Article A literal equation is an equation that has all variables or
 multiple variables. To solve a literal equation, you need to solve for a determined variable by using algebra to isolate it.[1] You will often need to do this when rearranging geometric formulas or when solving linear equations. In order to solve literal equations, use the same algebraic principles you would use to solve linear equations.
which variable you need to isolate. Isolating a variable means getting the variable on one side of an equation by itself. This information you know you will be given. [2] For example, you might be told to solve the area of a triangle formula for h {\displaystyle h}. Or, you might
know that you have the area and base of the triangle, so you need to solve for the height. So, you need to rearrange the formula and isolate the h {\displaystyle h} variable. Use inverse operations to cancel variables on one side of the equation and move them to the other side. Keep in mind the following
inverse operations: Multiplication and division. Addition and subtraction. Squaring and taking a square root. Advertisement 3 Keep the equation, you must also do to the other side to the
other as needed. For example, to solve the area of a triangle formula (A = 1 2 b h {\displaystyle A= {\frac {1}{2}}bh} ) for h {\displaystyle A = b h {\displaystyle A = b h {\displaystyle A} } isolate h {\displaystyle h} by dividing each side by 2: A × 2 = 2 × 1 2 b h {\displaystyle A = b h {\displaystyle A = b h {\displaystyle A}} isolate h {\displaystyle A} by dividing each side by 2: A × 2 = 2 × 1 2 b h {\displaystyle A} by dividing each side by 3: A × 2 = 2 × 1 2 b h {\displaystyle A} by dividing each side by 3: A × 2 = 2 × 1 2 b h {\displaystyle A} by dividing each side by 3: A × 2 = 2 × 1 2 b h {\displaystyle A} by dividing each side by 3: A × 2 = 2 × 1 2 b h {\displaystyle A} by dividing each side by 3: A × 2 = 2 × 1 2 b h {\displaystyle A} by dividing each side by 3: A × 2 = 2 × 1 2 b h {\displaystyle A} by dividing each side by 3: A × 2 = 2 × 1 2 b h {\displaystyle A} by dividing each side by 3: A × 2 = 2 × 1 2 b h {\displaystyle A} by dividing each side by 3: A × 2 = 2 × 1 2 b h {\displaystyle A} by dividing each side by 3: A × 2 = 2 × 1 2 b h {\displaystyle A} by dividing each side by 3: A × 2 = 2 × 1 2 b h {\displaystyle A} by dividing each side by 3: A × 2 = 2 × 1 2 b h {\displaystyle A} by dividing each side by 3: A × 2 = 2 × 1 2 b h {\displaystyle A} by dividing each side by 3: A × 2 = 2 × 1 2 b h {\displaystyle A} by dividing each side by 3: A × 2 = 2 × 1 2 b h {\displaystyle A} by dividing each side by 3: A × 2 = 2 × 1 2 b h {\displaystyle A} by dividing each side by 3: A × 3 = 2 × 1 2 b h {\displaystyle A} by dividing each side by 3: A × 3 = 2 × 1 2 b h {\displaystyle A} by dividing each side by 3: A × 3 = 2 × 1 2 b h {\displaystyle A} by dividing each side by 3: A × 3 = 2 × 1 2 b h {\displaystyle A} by dividing each side by 3: A × 3 = 2 × 1 2 b h {\displaystyle A} by dividing each side by 3: A × 3 = 2 × 1 2 b h {\displaystyle A} by dividing each side by 3: A × 3 = 2 × 1 2 b h {\displaystyle A} by dividing each side by 3: A × 3 = 2 × 1 2 b h {\displaystyle A} by dividing each side by 3: A × 3 
b \{\displaystyle\ b\}: 2\ A\ b = b\ h\ b\ \{\displaystyle\ b\}\} = \{\hrac\ \{2A\}\{b\}\}\} = \{\hrac\ \{2A\}\{b\}\}\}  Advertisement 1 Remember the slope-intercept form for the equation of a line. The slope-intercept form is y = m\ x + b\ \{\displaystyle\ b\}\} = \{\hrac\ \{2A\}\{b\}\}\} = \{\hrac\ \{2A\}\{b\}\} = \{\hrac\ \{2A\}\{b\}\}\} = \{\hrac\ \{2A\}\{b\}\}\} = \{\hrac\ \{2A\}\{b\}\} = \{\hrac\ \{2A\}\{b\}\}\} = \{\hrac\ \{2A\}\{b\}\} = \{\hrac\ \{2A\}\{b\}
y=mx+b}, where y = x + b}, where y = x + b} equals the y-coordinate of a point on the line, x = x + b} equals the y-coordinate of that same point, x = x + b} equals the y-coordinate of that same point, x = x + b} equals the y-coordinate of that same point, x = x + b} equals the y-coordinate of that same point, x = x + b} equals the y-coordinate of that same point, x = x + b} equals the y-coordinate of that same point, x = x + b} equals the y-coordinate of that same point, x = x + b} equals the y-coordinate of that same point, x = x + b}
 where x {\displaystyle x} and y {\displaystyle y} are the coordinates of a point on the line, A {\displaystyle A} is a positive integer, and B {\displaystyle B} and C {\displaystyle B} are the coordinates of a point on the line, A {\displaystyle A} is a positive integer, and B {\displaystyle B} and C {\displaystyle B
 keep the equation balanced, which means that whatever you do to one side of the equation, you must also do to the other side. [5] For example, you might have the equation of a line 3x + 2y = 4 {\displaystyle 3x + 2y = 4 {\displaystyle 3x + 2y = 4}. This is in standard form. If you need to find the y-intercept of the line, you might have the equation of a line 3x + 2y = 4 {\displaystyle 3x + 2y = 4}.
by isolating the y {\displaystyle 3x + 2y - 3x = 4 - 3x {\displaystyle } 2 = 4 - 3x 
 {\frac {4-3x}{2}}} EXPERT TIP Joseph Meyer is a High School Math Teacher based in Pittsburgh, Pennsylvania. He is an educator at City Charter High School Math, an online learning community dedicated to helping students succeed in
 Algebra. His site is set apart by its focus on fostering genuine comprehension through step-by-step understandings and confidently take on any test they face. He received his MA in Physics from Case Western Reserve University and his BA
 Reorder the variables and constants, if necessary. If you are changing an equation to slope-intercept or standard form, rearrange the variables, coefficients, and constants so that they follow the correct slope-intercept formula, you need to switch then they follow the correct slope-intercept or standard form, rearrange the variables, coefficients, and constants so that they follow the correct slope-intercept or standard form, rearrange the variables, coefficients, and constants so that they follow the correct slope-intercept or standard form, rearrange the variables and constants so that they follow the correct slope-intercept or standard form, rearrange the variables, coefficients, and constants so that they follow the correct slope-intercept or standard form, rearrange the variables and constants so that they follow the correct slope-intercept or standard form, rearrange the variables and constants so that they follow the correct slope-intercept or standard form, rearrange the variables and constants are standard form.
 order of the number in the number in the numerator, then simplify: y = -3x + 42 {\displaystyle y = {\frac{-3x+4}{2}} Now, since the formula is in proper slope-intercept form, it is easy to identify the y-intercept as 2. Advertisement 1 Solve this equation for b {\displaystyle b}. R = 5 b d -6 b a
  \{\text{displaystyle R=5bd-6ba}\}. Factor out the b \{\text{displaystyle b}\}: R = b ( 5 d - 6 a ) \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a = b ( 5 d - 6 a ) \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a = b ( 5 d - 6 a ) \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a = b ( 5 d - 6 a ) \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a = b \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaystyle R=b(5d-6a)}\} R 5 d - 6 a | \{\text{displaysty
 6a}=b} 2 Solve the circumference of a circle formula for the radius. The formula is C = 2 \pi r  (\displaystyle C = 2 \pi r ) (\displaystyle C = 2 \pi r )
  line in standard form, y = 1.2 \times + 5 {\displaystyle y = (\frac{1}{2}x + 5) Recall that standard form is A \times + B = C {\displaystyle A \times + B = C {\displaystyle A \times + B = C }. Cancel the fraction by multiplying each side of the equation by 2: 2y = 2(\frac{1}{2}x + 5) {\displaystyle 2y = x + 10 {\displaystyle 2y = x + 10} Subtract x = x + 10 {\displaystyle 2y = x + 10} Subtract x = x + 10 {\displaystyle 2y = x + 10} Subtract x = x + 10 {\displaystyle 2y = x + 10} Subtract x = x + 10 {\displaystyle 2y = x + 10} Subtract x = x + 10 {\displaystyle 2y = x + 10} Subtract x = x + 10 {\displaystyle 2y = x + 10} Subtract x = x + 10 {\displaystyle 2y = x + 10} Subtract x = x + 10 {\displaystyle 2y = x + 10} Subtract x = x + 10 {\displaystyle 2y = x + 10} Subtract x = x + 10 {\displaystyle 2y = x + 10} Subtract x = x + 10 {\displaystyle 2y = x + 10} Subtract x = x + 10 {\displaystyle 2y = x + 10} Subtract x = x + 10 {\displaystyle 2y = x + 10} Subtract x = x + 10 {\displaystyle 2y = x + 10} Subtract x = x + 10 Subtract x = x + 10
 sides of the equation: 2y - x = x + 10 - x {\displaystyle 2y-x=x+10-x} 2y - x = x + 10 - x {\displaystyle 2y-x=x+10-x} 2y - x = x + 10 - x {\displaystyle 2y-x=x+10-x} 2y - x = x + 10 - x {\displaystyle 2y-x=10} Rearrange the y {\displaystyle x} and x {\displaystyle 3y-x=x+10-x} 2y - x = x + 10 - x {\displaystyle 2y-x=x+10-x} 2y - x = x + 10 - x {\displaystyle 2y-x=x+10-x} 2y - x = x + 10 - x {\displaystyle 2y-x=x+10-x} 2y - x = x + 10 - x {\displaystyle 2y-x=x+10-x} 2y - x = x + 10 - x {\displaystyle 3y-x=x+10-x} 2y - x = x + 10 - x {\displaystyle 2y-x=x+10-x} 2y - x = x + 10 - x {\displaystyle 2y-x=x+10-x} 2y - x = x + 10 - x {\displaystyle 2y-x=x+10-x} 2y - x = x + 10 - x {\displaystyle 2y-x=x+10-x} 2y - x = x + 10 - x {\displaystyle 2y-x=x+10-x} 2y - x = x + 10 - x {\displaystyle 2y-x=x+10-x} 2y - x = x + 10 - x {\displaystyle 2y-x=x+10-x} 2y - x = x + 10 - x + 10 - x {\displaystyle 2y-x=x+10-x} 2y - x = x + 10 - 
integer for standard form: [9] - 1 (-x + 2y) = -1 (10) {\displaystyle x - 2y = -10} Advertisement Add New Question Question How do I solve 3x + w - r = y? Because you're working with four variables, you would need a total of four separate equations, each containing those variables, in order to find
their values. Question In the equation Perimeter = 2(L + W), what is L? L is the length of whatever figure you're working with. Question by 12m. See more answers Ask a Question Advertisement Co-authored by: Texas Certified Math Teacher This article was co-
authored by JohnK Wright V. Jo
reasoning, and math models with applications. He was a Mathematics Major at Southeastern Louisiana and he has a Bachelor of Science from The University of the State of New York (now Excelsior University) and a Master of Science from The University of the State of New York (now Excelsior University) and a Master of Science from The University of the State of New York (now Excelsior University) and a Master of Science from The University of the State of New York (now Excelsior University) and a Master of Science from The University of the State of New York (now Excelsior University) and a Master of Science from The University of the State of New York (now Excelsior University) and a Master of Science from The University of the State of New York (now Excelsior University) and a Master of Science from The University (now Excelsior University) and a Master of Science from The University (now Excelsior University) and a Master of Science from The University (now Excelsior University) and a Master of Science from The University (now Excelsior University) and a Master of Science from The University (now Excelsior University) and a Master of Science from The University (now Excelsior University) and a Master of Science from The University (now Excelsior University) and a Master of Science from The University (now Excelsior University) and a Master of Science from The University (now Excelsior University) and a Master of Science from The University (now Excelsion University) and a Master of Science from The University (now Excelsion University) and a Master of Science from The University (now Excelsion University) and a Master of Science from The University (now Excelsion University) and a Master of Science from The University (now Excelsion University) and a Master of Science from The University (now Excelsion University) and a Master of Science from The University (now Excelsion University) and a Master of Science from The University (now Excelsion University (now Excelsion University (now Excelsion University (now Exc
 by using algebra to isolate it.[1] You will often need to do this when rearranging geometric formulas or when solving linear equations. In order to solve literal equations, use the same algebraic principles you would use to solve linear equations. In order to solve linear equations, use the same algebraic principles you would use to solve linear equations.
need to rearrange the formula and isolate the h {\displaystyle h} variable. 2 Use algebra to solve for the desired variable. Use inverse operations: Multiplication and division. Addition and subtraction. Squaring and taking a
 square root. Advertisement 3 Keep the equation balanced. Whatever you do to one side of the equation, you must also do to the other as needed. For example, to solve the area of a triangle formula (A = 1 2 b h {\displaystyle A=
   \{ (b) \} = h \} Rearrange the formula, if desired: h = 2 A b \{ (b) \} = h \} Rearrange the formula, if desired: h = 2 A b \{ (b) \} = h \} Advertisement 1 Remember the slope-intercept form is y = mx + b \{ (b) \} = h \} Rearrange the formula, if desired: h = 2 A b \{ (b) \} = h \} Rearrange the formula, if desired: h = 2 A b \{ (b) \} = h \} Rearrange the formula, if desired: h = 2 A b \{ (b) \} = h \} Rearrange the formula, if desired: h = 2 A b \{ (b) \} = h \} Rearrange the formula, if desired: h = 2 A b \{ (b) \} = h \} Rearrange the formula, if desired: h = 2 A b \{ (b) \} = h \} Rearrange the formula, if desired: h = 2 A b \{ (b) \} = h \} Rearrange the formula, if desired: h = 2 A b \{ (b) \} = h \} Rearrange the formula, if desired: h = 2 A b \{ (b) \} = h \} Rearrange the formula, if desired: h = 2 A b \{ (b) \} = h \} Rearrange the formula, if desired: h = 2 A b \{ (b) \} = h \} Rearrange the formula, if desired: h = 2 A b \{ (b) \} = h \} Rearrange the formula, if desired: h = 2 A b \{ (b) \} = h \} Rearrange the formula, if h = 2 A b \{ (b) \} = h \} Rearrange the formula, if h = 2 A b \{ (b) \} = h \} Rearrange the formula, if h = 2 A b \{ (b) \} = h \} Rearrange the formula, if h = 2 A b \{ (b) \} = h \} Rearrange the formula, if h = 2 A b \{ (b) \} = h \} Rearrange the formula and h = 2 A b \{ (b) \} = h \}
  equals the x-coordinate of that same point, m \ are the coordinates of a point on the line, and b \ equals the y-intercept.[3] 2 Remember the standard form is A x + B y = C \ and y \ are the coordinates of a point on the line, A \ displaystyle Ax+By=C\, where x \ and y \ are the coordinates of a point on the line, A \ displaystyle by are the standard form is A x + B y = C \ and y \ displaystyle x and y \ are the coordinates of a point on the line, A \ displaystyle by are the standard form is A x + B y = C \ and y \ displaystyle x and 
A} is a positive integer, and B {\displaystyle B} and C {\displaystyle B} and 
to the other side.[5] For example, you might have the equation of a line 3 x + 2 y = 4 {\displaystyle 3x + 2y = 4 {\displaystyle 
3x + 2y - 3x = 4 - 3x {\displaystyle 3x + 2y - 3x = 4 - 3x {\displaystyle 3x + 2y - 3x = 4 - 3x }} EXPERT TIP Joseph Meyer Math Teacher Joseph Meyer is a High School Math Teacher based
 in Pittsburgh, Pennsylvania. He is an educator at City Charter High School, where he has been teaching for over 7 years. Joseph is also the founder of Sandbox Math, an online learning community dedicated to helping students succeed in Algebra. His site is set apart by its focus on fostering genuine comprehension through step-by-step understanding
 (instead of just getting the correct final answer), enabling learners to identify and overcome misunderstandings and confidently take on any test they face. He received his MA in Physics from Baldwin Wallace University. To solve an equation for a variable like "x," you need to manipulate the
 equation to isolate x. Use techniques like the distributive property, combining like terms, factoring, adding or subtracting the same number, and multiplying or dividing by the same non-zero number to isolate "x" and find the answer. 4 Reorder the variables and constants, if necessary. If you are changing an equation to slope-intercept or standard
 form, rearrange the variables, coefficients, and constants so that they follow the correct formula, you need to switch the order of the number in the numerator, then simplify: y = -3x + 42 {\displaystyle y = {17xc {-3x+4}{2}}} y = -3x + 42 {\displaystyle y = {17xc {-3x+4}{2}}} y = -3x + 42 {\displaystyle y = {17xc {-3x+4}{2}}} y = -3x + 42 {\displaystyle y = {17xc {-3x+4}{2}}}
32x + 2 {\displaystyle y={\frac {-3}{2}}x+2} Now, since the formula is in proper slope-intercept form, it is easy to identify the y-intercept as 2. Advertisement 1 Solve this equation for b {\displaystyle R=5bd-6ba} . Factor out the b {\displaystyle B= b (5d-6a)} . Factor out the b {\displaystyle B= b (5d-6a)} . Isolate the b
  \{\text{b}\} by dividing each side by the expression in parentheses: R = 0 a = b = 0 by displaystyle \{\text{b}\} 2 Solve the circumference of a circle formula for the radius. The formula is C = 2 \pi r  by displaystyle C = 2 \pi r 
  r = \frac{2\pi r}{2\pi r} If desired, reverse the order of the equation for standard form. r = C 2\pi r Recall that standard form is Ax + By = C r Recall that standard form is Ax + By = C r Recall that standard form is Ax + By = C r Recall that standard form is Ax + By = C r Recall that standard form is Ax + By = C r Recall that standard form is Ax + By = C r Recall that standard form is Ax + By = C r Recall that standard form is Ax + By = C r Recall that standard form is Ax + By = C r Recall that standard form is Ax + By = C r Recall that standard form is Ax + By = C r Recall that standard form is Ax + By = C r Recall that standard form is Ax + By = C r Recall that standard form is Ax + By = C r Recall that standard form is Ax + By = C r Recall that standard form is Ax + By = C r Recall that standard form is Ax + By = C r Recall that Ax + By = C r Recall
 Ax+By=C . Cancel the fraction by multiplying each side of the equation by 2: 2y=2(12x+5) {\displaystyle 2y=x+10} Subtract x {\displaystyle 2y=x+10} Subtract x {\displaystyle 2y-x=x+10} Rearrange the y
  \{\text{displaystyle y}\}\ and x \{\text{displaystyle x}\}\ variables so that they are in the standard form: -x+2y=10\} x-2y=10 y=-1 y=-1 y=-10 y
2y=-10} Advertisement Add New Question Perimeter = 2(L + W), what is L? L is the length of whatever figure you're working with four variables, you would need a total of four separate equations, each containing those variables, you would need a total of four variables, in order to find their values.
  with. Question For the equation 12am = 4, how do I solve for a? Divide both sides of the equation by 12m. See more answers Ask a Question Advertisement Co-authored by: Texas Certified Math Teacher at Bridge Builder Academy in Plano, Texas. With over
20 years of teaching experience, he is a Texas SBEC Certified 8-12 Mathematics Teacher. He has taught in six different schools and has taught pre-algebra, algebra 2, pre-calculus, statistics, math reasoning, and math models with applications. He was a Mathematics Major at Southeastern Louisiana and he has a Bachelor of
 Science from The University of the State of New York (now Excelsior University) and a Master of Science in Computer Information Systems from Boston University of the State of New York (now Excelsior University) and a Master of Science in Computer Information Systems from Boston University of the State of New York (now Excelsior University) and a Master of Science in Computer Information Systems from Boston University of the State of New York (now Excelsior University) and a Master of Science in Computer Information Systems from Boston University of the State of New York (now Excelsior University) and a Master of Science in Computer Information Systems from Boston University of the State of New York (now Excelsior University) and a Master of Science in Computer Information Systems from Boston University (now Excelsior University) and a Master of Science in Computer Information Systems from Boston University (now Excelsior University) and a Master of Science in Computer Information Systems from Boston University (now Excelsior University) and a Master of Science Information Systems from Boston University (now Excelsior University) and a Master of Science Information Systems from Boston University (now Excelsior University) and a Master of Science Information Systems from Boston University (now Excelsion University) and a Master of Science Information Systems from Boston University (now Excelsion University) and a Master of Science Information Systems from Boston University (now Excelsion University) and a Master of Science Information Systems from Boston University (now Excelsion University) and a Master of Science Information Systems from Boston University (now Excelsion University) and a Master of Science Information Systems from Boston University (now Excelsion University) and a Master of Science Information Systems from Boston University (now Excelsion University) and a Master of Science Information Systems from Boston University (now Excelsion University) and a Master of Science Information Systems from Bost
 equations. In order to solve literal equations, use the same algebraic principles you would use to solve linear equations to you, or you can figure it out based on what information yound use to solve linear equations. 1 Determine which variable means getting the variable on one side of an equation by itself. This information you can figure it out based on what information you can figure it out based on what information you can figure it out based on what information you can figure it out based on what information you can figure it out based on what information you can figure it out based on what information you can figure it out based on what information you can figure it out based on what information you can figure it out based on what information you can figure it out based on what information you can figure it out based on what information you can figure it out based on what information you can figure it out based on what information you can figure it out based on what information you can figure it out based on what information you can figure it out based on what information you can figure it out based on what information you can figure it out based on what information you can figure it out based on what information you can figure it out based on what information you can figure it out based on the figure it out based on
 know you will be given.[2] For example, you might be told to solve the area of a triangle formula for h {\displaystyle h}. Or, you need to rearrange the formula and isolate the h {\displaystyle h} variable. 2 Use algebra to solve for the desired
 variable. Use inverse operations to cancel variables on one side of the equation and move them to the other side. Keep in mind the following inverse operations: Multiplication and division. Addition and subtraction. Squaring and taking a square root. Advertisement 3 Keep the equation balanced. Whatever you do to one side of the equation, you must
also do to the other side. This ensures that your equation remains true, and in the process you are moving variables from one side to the other as needed. For example, to solve the area of a triangle formula (A = 1 2 b h {\displaystyle A = {\frac {1}{2}}bh} ) for h {\displaystyle A = {\frac {1}{2}}bh} ) for h {\displaystyle A = 2 \times 1 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b h {\displaystyle A = 4 \frac {1} 2 b
  \{\displaystyle\ A\times\ 2=2\times\ \{\frac\ \{2A\}\{b\}\}=h\}\ 2\ A=b\ h\ \{\displaystyle\ \{\frac\ \{2A\}\{b\}\}=h\}\ Rearrange\ the\ formula,\ if\ desired:\ h=2\ A\ b\ \{\displaystyle\ h=\{\frac\ \{2A\}\{b\}\}\}=h\}\ Rearrange\ the\ formula,\ if\ desired:\ h=2\ A\ b\ \{\displaystyle\ h=\{\frac\ \{2A\}\{b\}\}\}=h\}\ Rearrange\ the\ formula,\ if\ desired:\ h=2\ A\ b\ \{\displaystyle\ h=\{\frac\ \{2A\}\{b\}\}\}=h\}\ Rearrange\ the\ formula,\ if\ desired:\ h=2\ A\ b\ \{\displaystyle\ h=\{\frac\ \{2A\}\{b\}\}\}=h\}\ Rearrange\ the\ formula,\ if\ desired:\ h=2\ A\ b\ \{\displaystyle\ h=\{\frac\ \{2A\}\{b\}\}\}=h\}\ Rearrange\ the\ formula,\ if\ desired:\ h=2\ A\ b\ \{\displaystyle\ h=\{\frac\ \{2A\}\{b\}\}\}=h\}\ Rearrange\ the\ formula,\ if\ desired:\ h=2\ A\ b\ \{\displaystyle\ h=\{\frac\ \{2A\}\{b\}\}\}=h\}\ Rearrange\ the\ formula,\ if\ desired:\ h=2\ A\ b\ \{\displaystyle\ h=\{\frac\ \{2A\}\{b\}\}\}=h\}\ Rearrange\ the\ formula,\ if\ desired:\ h=2\ A\ b\ \{\displaystyle\ h=2\ A\ b\ 
 Advertisement 1 Remember the slope-intercept form for the equalis the y-coordinate of a point on the line, x \in \mathbb{R} where y \in \mathbb{R} and b {\displaystyle x} equals the x-coordinate of that same point, x \in \mathbb{R} and b {\displaystyle y} equals the y-coordinate of a point on the line, x \in \mathbb{R} and b {\displaystyle x} equals the y-coordinate of that same point, x \in \mathbb{R} and b {\displaystyle x} equals the y-coordinate of that same point, x \in \mathbb{R} equals the y-coordinate of that same point, x \in \mathbb{R} equals the y-coordinate of a point on the line, x \in \mathbb{R} equals the y-coordinate of that same point, x \in \mathbb{R} equals the y-coordinate of that same point, x \in \mathbb{R} equals the y-coordinate of that same point, x \in \mathbb{R} equals the y-coordinate of that same point on the line, x \in \mathbb{R} equals the y-coordinate of that same point on the line y-coordinate of that y-coord
equals the y-intercept.[3] 2 Remember the standard form of a line. The standard form is A x + B y = C \{ displaystyle A \}  is a positive integer, and B \{ displaystyle B \}  and C \{ displaystyle B \}  are the coordinates of a point on the line, A \{ displaystyle A \}  is a positive integer, and B \{ displaystyle B \}  and C \{ displaystyle B \}  are the coordinates of a point on the line, A \{ displaystyle B \}  and C \{ displaystyle B \}  and C \{ displaystyle B \}  are the coordinates of a point on the line, A \{ displaystyle B \}  and C \{ displaystyle B \}  and C \{ displaystyle B \}  are the coordinates of a point on the line, A \{ displaystyle B \}  and C 
the appropriate variable. Use inverse operations to move variables from one side of the equation to the other side. Remember to keep the equation balanced, which means that whatever you do to one side of the equation to the other side. Semember to keep the equation of a line 3x + 2y = 4 (displaystyle 3x + 2y = 4).
This is in standard form. If you need to find the y-intercept of the line, you need to rearrange the formula to slope-intercept form by isolating the y {\displaystyle 3x + 2y - 3x = 4 - 3x {\displaystyle } 2y = 4 - 3x {\displaystyle } 2x = 4 - 3x
sides by 2 {\displaystyle 2} : 2 y 2 = 4 - 3 x 2 {\displaystyle 2} : 2 y 2 = 4 - 3 x 2 {\displaystyle y={\frac {4-3x}{2}}} EXPERT TIP Joseph Meyer is a High School, where he has been teaching for
over 7 years. Joseph is also the founder of Sandbox Math, an online learning community dedicated to helping students succeed in Algebra. His site is set apart by its focus on fostering genuine comprehension through step-by-step understanding (instead of just getting the correct final answer), enabling learners to identify and overcome
misunderstandings and confidently take on any test they face. He received his MA in Physics from Case Western Reserve University and his BA in Physics from Baldwin Wallace University and his BA in Physics from Baldwin Wallace University. To solve an equation for a variable like "x," you need to manipulate the equation to isolate x. Use techniques like the distributive property, combining like terms
factoring, adding or subtracting the same number, and multiplying or dividing by the same non-zero number to isolate "x" and find the answer. 4 Reorder the variables, coefficients, and constants so that they follow the correct
formula.[7] For example, to change y = 4 - 3x 2 \{displaystyle\ y = \{frac \{-3x+4\}\{2\}\}\}\ y = -3x+4\{2\}\}\}\ y = -3x+4\{2\}\}\ y = -3x+4\{2\}
 slope-intercept form, it is easy to identify the y-intercept as 2. Advertisement 1 Solve this equation for b \{\text{displaystyle b} : R = b \ d - 6 \ a \ followed]. Isolate the b \{\text{displaystyle b} : R = b \ d - 6 \ a \ followed]. Isolate the b \{\text{displaystyle b} : R = b \ d - 6 \ a \ followed]. Isolate the b \{\text{displaystyle b} : R = b \ d - 6 \ a \ followed]. Isolate the b \{\text{displaystyle b} : R = b \ d - 6 \ a \ followed]. Isolate the b \{\text{displaystyle b} : R = b \ d - 6 \ a \ followed]. Isolate the b \{\text{displaystyle b} : R = b \ d - 6 \ a \ followed]. Isolate the b \{\text{displaystyle b} : R = b \ d - 6 \ a \ followed].
b ( 5 d - 6 a ) 5 d - 6 a {\displaystyle {\frac {R}{5d-6a}}} = {\frac {R}{5d-6a}} = {\frac {
 circumference, and r \in \Gamma is the radius. So you need to isolate the r \in \Gamma is the radius. So you need to isolate the r \in \Gamma is the radius. So you need to isolate the r \in \Gamma is the radius. So you need to isolate the r \in \Gamma is the radius. So you need to isolate the r \in \Gamma is the radius. So you need to isolate the r \in \Gamma is the radius. So you need to isolate the r \in \Gamma is the radius. So you need to isolate the r \in \Gamma is the radius. Isolate the r \in \Gamma is the radius. So you need to isolate the r \in \Gamma is the radius. So you need to isolate the r \in \Gamma is the radius. Isolate the r \in \Gamma is the radius. So you need to isolate the r \in \Gamma is the radius. So you need to isolate the r \in \Gamma is the radius. Isolate the r \in \Gamma is the radius. So you need to isolate the r \in \Gamma is the radius. Isolate the r \in \Gamma is the radius. Isolate the r \in \Gamma is the radius. So you need to isolate the r \in \Gamma is the radius. Isolate the r \in \Gamma is the radius is
desired, reverse the order of the equation for standard form: r = C 2 \pi \{ c \} \}  . Cancel the fraction by multiplying each side of the equation by 2: 2 y
= 2 ( 1 2 x + 5 ) {\displaystyle 2y=x+10} Subtract x {\displaystyle 2y-x=x+10} Rearrange the y {\displaystyle x} and x {\displaystyle x} and x {\displaystyle x} are in the standard form:
x + 2y = 10 {\displaystyle -x + 2y = 10}. Multiply both sides by -1 {\displaystyle -1}, since A {\displaystyle -1}, since A {\displaystyle -1}, since A {\displaystyle -1}. Multiply both sides by -1 {\displaystyle -1}, since A {\displaystyle -1} Advertisement Add New Question Question How do I solve 3x + w - r = y? Because
you're working with four variables, you would need a total of four separate equations, each containing those variables, in order to find their values. Question For the equation 12am = 4, how do I solve for a? Divide both sides of the
  equation by 12m. See more answers Ask a Question Advertisement Co-authored by: Texas Certified Math Teacher This article was co-authored by JohnK Wright V. jo
He has taught in six different schools and has taught pre-algebra, algebra 1, geometry, algebra 2, pre-calculus, statistics, math reasoning, and math models with applications. He was a Mathematics Major at Southeastern Louisiana and he has a Bachelor of Science from The University of the State of New York (now Excelsior University) and a Master
of Science in Computer Information Systems from Boston University. This article has been viewed 96,417 times. Here, you will learn how to solve literal equations with
some carefully chosen examples. What is a literal equation? It is an equation we will show how to solve y = mx + b which is also a literal equation. See below a more detailed guideline
 showing how to solve y = mx + b for x as we solve 8 = 2x + 4 for x. y = mx + b Subtract b from both sides by y = mx + b Subtract 4 from both sides by y = mx + b Subtract 4 from both sides by y = mx + b Subtract 5 from both sides by y = mx + b Subtract 4 from both sides by y = mx + b Subtract 5 from both sides by y = mx + b Subtract 5 from both sides by y = mx + b Subtract 5 from both sides by y = mx + b Subtract 5 from both sides by y = mx + b Subtract 5 from both sides by y = mx + b Subtract 5 from both sides by y = mx + b Subtract 5 from both sides by y = mx + b Subtract 6 from both sides by y = mx + b Subtract 6 from both sides by y = mx + b Subtract 6 from both sides by y = mx + b Subtract 8 from both sides by y = mx + b Subtract 8 from both sides by y = mx + b Subtract 8 from both sides by y = mx + b Subtract 8 from both sides by y = mx + b Subtract 8 from both sides by y = mx + b Subtract 8 from both sides 8 from both
 = x We can see that the process is similar whether we are solving a literal equation or not. All we need to do is to isolate things. For (8 - 4) / 2 = x though, we can take a step further by doing the math since we are dealing with numbers. Therefore, x = (8 - 4) / 2 = 2 Hopefully, this example was clear enough to put you on the right track. More
examples showing how to solve literal equations. 1) Solve 2a + b = d for b2a + b = d for b2a + b = d for b2a + b = d - 2a  b =
equation by lh V/lh = (lh/lh)w V/lh = w3) Solve x = a + b + c/3 for c Multiply both sides of the equation by 3x = a + b + c/3 for c Multiply both sides of the equation by 3x = a + b + c/3 for c Multiply both sides of the equation by 3x = a + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b = b + b + c/3 for c Multiply both sides 3x - a - b + b + c/3 for c Multiply both sides 3x - a - b + b + c/3 for c Multiply both sides 3x - a - b + b + c/3 for c Multiply both sides 3x - a - b + b + c/3 for c Multiply both sides 3x - a - b + b + c/3 f
= z for yFirst isolate x + y by getting rid of 2. To get rid of 2, divide both sides by 2.2 / 2 (x + y) = z / 2Subtract x from both sides of the equations. Now it's
time to discuss solving literal equations. In this lesson, we will define literal equations, examine examples of literal equations, as well as learn how to solve literal equations. Let's literally get excited to begin! Recall from our earlier study, that an equation is a mathematical sentence that uses an equal sign, = , to show that two expressions are equal.
 Unlike other equations you have already worked with, literal equations are equations primarily made up of letters and variables. Many of the literal equations, they still follow the same rules of solving. Return to the Table of
 Contents Although the idea of equations including mostly letters may seem like a foreign topic, you have used literal equations you have already worked with in your life. Here are some of the examples of literal equations you have used literal equations you have already worked with in your life. Here are some of the examples of literal equations you have already worked with in your life.
 \cdot r \cdot t Each letter (or variable) in the literal equation has a specific meaning and changes from problem to problem. Return to the Table of Contents Solving" a literal equation essentially means we are rearranging the letters (or variables) to
 isolate a new variable. A literal equation is "solved" when the variable of interest is alone on one side of the equation. Similar to solving equations, we will use inverse operations to isolate the variable by itself. Here are examples of inverse operations to isolate the variable by itself. Here are examples of inverse operations to isolate the variable by itself.
 t \text{Division} Here are a few examples of solving literal equations: Solve for h in the following literal equations: A = b \cdot h Remember this formula? As stated above, this is the Area of a Rectangle. As noted previously, there are mainly letters and variables in Literal Equations. If this was a simple equation such as t = b \cdot h Remember this formula? As stated above, this is the Area of a Rectangle.
 divided both sides by 2 to achieve my final answer. When "solving" Literal Equations, we follow the same rules as simple equations. Therefore, in order to solve for h in this equation, we need to isolate it by itself. Therefore, in order to solve for h in this equation, we need to isolate it by itself. Therefore, in order to solve for h in this equation, we need to isolate it by itself.
 dfrac\{A\}\{b\} Although formulas are a common example of Literal Equations, not all Literal Equations are formulas. We can also rearrange and "solve" a Literal Equation x \textcolor{red}{- n} = m + n \textcolor{red}{- n} Subtract n from both sides x
n = m m is now isolated m = x - n Even though there were no numbers in the equation, we have "solved" the Literal Equations only take one step to solve. Here is an example of using multiple steps to solve Literal Equations. Solve for r in the following equation: V = \pi r^2 h Given is the
 formula for the Volume of a Cylinder. In order to solve for r, we must first get r^2 by itself: \dfrac\{V\}\{\pi h\} = \c V\}\{\pi h\} = r^2 Then to solve for r, we must take the square root of both sides: \sqrt\{\pi v\} = \c V\}\{\pi v\}
 Equation: r = \sqrt{\theta rt (\theta rac(V) (\eta 
 equation, without having to simplify at the end. In the other method, we can simply divide by 4 at the beginning to avoid using the Distributive Property. For example: dfrac\{P\}\{4\} Then, we would simply have to subtract y from each side: x + y \cdot (P)\{4\} Then, we would simply have to subtract y from each side: x + y \cdot (P)\{4\} Then, we would simply have to subtract y from each side: x + y \cdot (P)\{4\} Then, we would simply have to subtract y from each side: x + y \cdot (P)\{4\} Then, we would simply have to subtract y from each side: x + y \cdot (P)\{4\} Then, we would simply have to subtract y from each side: x + y \cdot (P)\{4\} Then, we would simply have to subtract y from each side: x + y \cdot (P)\{4\} Then, we would simply have to subtract y from each side: x + y \cdot (P)\{4\} Then, we would simply have to subtract y from each side: x + y \cdot (P)\{4\} Then, we would simply have to subtract y from each side: x + y \cdot (P)\{4\} Then, we would simply have to subtract y from each side: x + y \cdot (P)\{4\} Then, we would simply have to subtract y from each side: x + y \cdot (P)\{4\} Then, we would simply have to subtract y from each side: x + y \cdot (P)\{4\} Then, we would simply have to subtract y from each side: x + y \cdot (P)\{4\} Then, we would simply have to subtract y from each side: x + y \cdot (P)\{4\} Then, we would simply have to subtract y from each side: x + y \cdot (P)\{4\} Then, we would simply have to subtract y from each side in the first of the first
 with: x = \dfrac{P}{4}- y Notice how the equations is already simplified, and no other steps are needed. Return to the Table of Contents Here's a short video demonstrating how to solve literal equations; and formulas, involve fractions in some sort. For
 example, here's the formula for the Volume of a Sphere: V = \frac{4}{3} \pi^3 Vpi r^3 Let's say we are asked to solve for the radius, r. First, we must eliminate the fraction. Let's do this by multiplying by the reciprocal. V = \frac{4}{3} \pi^3 Vpi r^3 Upi r^3 Upi
r^3 \frac{3V}{4\pi c} = r^3 \frac{3V}{4\pi c} Divide each side by \pi \dfrac{3V}{4\pi}} = \sqrt[3]{\dfrac{3V}{4\pi}} = r^3 Simplify \quad \qu
for the other variable? For instance, solve the following equation for x:y = \frac{1}{8} Notice how there are two variables in the equation and our ultimate goal is still to isolate x. Remember, we can eliminate all fractions in one move by multiplying all terms by the Least Common Denominator. In this Literal Equation, the least
common denominator is 8. Therefore, we will multiply each term by 8. 8 \cdot \dfrac\{1\}{8} This will give us an equation 8y \textcolor\{red\}{+ 1} = 2x - 1 \textcolor\{red\}{+ 1} Add 1 to
each side 8y + 1 = 2x Simplify \\dfrac{8y + 1} {\textcolor{red}{2}} = x Simplify \\dfrac{8y}{2} + \\dfrac{1}{2} = x Simplify \\dfrac{1}{2} = x
equation that contains all letters (or variables) or an Equations by isolating a determined variable on one side of the equations by isolating a determined variable on one side of the equations by isolating a determined variable on one side of the equations.
Operations in order to solveRemember, whatever you do to one side, you must do to the Contents Literal Equations, you can multiply each term by the Least Common Denominator to eliminate the fractions, simply put,
are equations containing two or more variables. Your goal is to solve for just one variable with respect to others. If you know how to solve regular equation is an equation that involves more than one variable. More so, a variable or
 "literal" is a math symbol that represents an arbitrary value or number. The letters in the alphabet are usually used to represent variables such as [latex]z[/latex], [latex]
equation. Key Strategy to Solve Literal Equations, Two-Step Equations, Two-Step Equations, and Multi-Step Equations, the process of solving literal equation is to isolate or keep by itself a certain variable on one side of the equation, and Multi-Step Equations, the process of solving literal equation is to isolate or keep by itself a certain variable on one side of the equation (either left or right) and the rest on the opposite side. If you know how to solve regular One-Step Equations, and Multi-Step Equations, the process of solving literal
equations is very similar. Therefore, you should not be intimidated by literal equation. So, the key idea looks like this. Notice that the variable that you want to solve is isolated on one side of the equation. In this case, it is on the left side. Observe
that the variable [latex]\color{red}\Large{x}[/latex] is by itself on one side of the equation while the rest are on the opposite side. Let's go over some examples! An Example of One-Step Literal equation [latex]\color{red}\Large{x}[/latex] is by itself on one side of the equation while the rest are on the opposite side. Let's go over some examples! An Example of One-Step Literal equation [latex]\color{red}\Large{x}[/latex] is by itself on one side of the equation while the rest are on the opposite side. Let's go over some examples!
[latex]P[/latex] stands for perimeter and [latex]s[/latex] which is multiplying [latex]s[/latex]. To solve for [latex]s[/latex], we need to get rid of the coefficient [latex]s[/latex] which is multiplying [latex]s[/latex]. To solve for [latex]s[/latex] which is multiplying [latex]s[/latex] which is multiplying [latex]s[/latex].
why we should divide both sides by [latex]4[/latex]! We can isolate variable [latex]s[/latex] on the right side of the equation, we are done! Examples of Two-Step Literal Equations Example 2: Solve for [latex]L[/latex] in the
literal equation [latex]P = 2L + 2W[/latex] = perimeter, [latex]L[/latex] = length, and [latex]W[/latex] = width. It is possible to isolate the variable [latex]L[/latex] on the right side. However, why not flip the equation around so we
can keep the variable [latex]L[/latex] alone on the left? Well, sounds like a plan! Don't be intimidated by how it looks. Just focus on the things you want to do, that is to solve for [latex]L[/latex] and the rest of the steps will follow. We want [latex]L[/latex] and the rest of the steps will follow. We want [latex]L[/latex] and the rest of the steps will follow. We want [latex]L[/latex] and the rest of the steps will follow.
by [latex]2W[/latex]. Divide both sides by [latex]2[/latex]. Simplify, now [latex]2[/latex] stands alone - solved! Example 3: Solve for [latex]x[/latex] in the literal equation interesting is that we are going to isolate a variable that is part of the numerator of a fraction. I'm not sure if you remember that whenever you
see something like this, try to get rid of the denominator first. This makes the entire solving process a lot simpler. Since that denominator flatex]3/[latex] is dividing the expression "[latex]3/[latex] is dividing the expression "[latex]4/[latex]5/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[latex]6/[late
keep the [latex]x[/latex] by itself. Not too bad, right? Okay, we want to solve for [latex]x[/latex]. Let's isolate it on the right side. Start by multiplying both sides by [latex]y[/latex]. That's the only way to eliminate the [latex]-
y[/latex] on the right side. Simplify, [latex]x[/latex] is now happily by itself. Done! Examples of Multi-Step Literal Equations Example 4: Solve for [latex]x[/latex] in the literal equation below. This is the formula used to convert the measure of temperature in the Celsius unit to the Fahrenheit scale. Notice that to find the value of [latex]F[/latex]
(Fahrenheit), we need to plug in some value of [latex]C[/latex] in terms of [latex]C[/latex]. That's what we're going to do now... All eyes are on
[latex]C[/latex]. The goal is to isolate it. We'll get rid of [latex]32[/latex] on the right by subtracting both sides by [latex]5[/latex] to cancel out the denominator [latex]5[/latex]. We're getting there! I suggest not to distribute the [latex]5[/latex] to cancel out the denominator [latex]5[/latex].
 into [latex](F - 32)[/latex]. One more step, divide both sides by [latex]9[/latex] to finally isolate the variable on the right. That's it! We have solved for [latex]4. This is really interesting! Some of you might think that it is impossible to isolate the variable
[latex]h[/latex] since it is found pretty much in three places: one [latex]h[/latex] out of the group. But before you could factor [latex]h[/latex] out, make sure that you move all the [latex]h[/latex]'s on
one side of the equation. Since we have two terms of [latex]h[/latex]'s on the right side, we might as well move the term [latex]h[/latex] terms on the right side. We can do that by subtracting both sides by [latex]3h[/latex]. After simplification, it's
wonderful to see all our [latex]h[/latex] terms just on the right side. It's obvious that the step should involve factoring [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex] out. Wow, this is great! Just a single [latex]h[/latex]h[
some cancellations on the right side. That is it! We have solved for [latex]h[/latex]. Example 6: Solve for [latex]k[/latex] in the literal equation is to perform cross multiplication. In doing so, the denominators on both sides of the equation should disappear. From that point, we can
apply the same strategy from Example 5 to solve for [latex]x[/latex] out. In this equation, we have two [latex]x[/latex] out. In this equation, we have two [latex]x[/latex] out. In this equation, we have two [latex]x[/latex] out. In this equation and then hopefully factoring the equation. We want the
denominators gone so without any hesitation we should apply the cross multiplication technique. Then simply apply the distributive property on both sides of the equation. At this point, we decide where to keep or gather all our [latex]x[/latex] on the right
by adding [latex]5x[/latex] on both sides. This is how it looks after simplification. The next step is to deal with the [latex]3xy[/latex] on the right side. We want to move it to the left as well. Subtract both sides by [latex]3xy[/latex] on the right side! Now, the [latex]3xy[/latex] on the right side.
 -6[/latex] on the left must be moved to the right side. We can do this by adding [latex]s[/latex] to both sides. This is getting nicer! We have all our [latex]x[/latex] to both sides by the expression [latex]s[/latex]. Perform some
cancellations. Take a quiz: Literal Equations Quiz You might also like these tutorials: Tags: Intermediate Algebra, Lessons What is a literal equation sare an example of lite
relationship expressed by the equations. Step 1: Identify the variable that we have remove the remaining terms all around the variable that we have remove the remaining terms all around the variable that we have remove the remaining terms all around the variable that we have remove the remaining terms all around the variable that we have remove the remaining terms all around the variable that we have remove the remaining terms all around the variable that we have remove the remaining terms all around the variable that we have remove the remaining terms all around the variable that we have remove the remaining terms all around the variable that we have remove the remaining terms all around the variable that we have remove the remaining terms all around the variable that we have remove the remaining terms all around the variable that we have remove the remaining terms all around the variable that we have remove the remaining terms all around the variable that we have remove the remaining terms all around the variable that we have remove the remaining terms all around the variable that we have remove the remaining terms all around the variable that we have remove the remaining terms all around the variable that we have remove the remaining terms all around the variable that we have remove the remaining terms all around the variable that we have remove the remaining terms all around the variable that we have remove the remaining terms all around the variable that we have remove the remaining terms along the variable that we have remove the remaining terms along the variable that we have remove the remaining terms along the variable that we have remove the remaining terms along the variable that we have remove the remaining terms along the variable that we have remove the remaining terms along the variable that we have remove the remaining terms along the variable that we have remove the remaining terms along the variable that we have remove the variable that we have the variable that we have the variable that we ha
 Example 1 : Solve V = lwh for wSolution : Given, V = lwh Solving for w.Divide by lh on both sides, W(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution : Given, M = (y2 - y1)/(x2 - x1) for y2Solution
y2y2 = mx2 - mx1 + y1So, the solution of y is (c - ax)/bSo, the solution is (c - ax)/bSo, the solution of y is (c - ax)/bSo, the solution of y is (c - ax)/bSo, the solution of y is (c - ax)/bSo, the solution is (c - ax)/bSo, the solution of y is (c - ax)/bSo, the solution of y is (c - ax)/bSo, the solution of y is (c - ax)/bSo, the solution of y is (c - ax)/bSo, the solution is (c - ax)/bSo.
4 on both sides, 4A = a + b + c + dAlong with c, a, b and d are added. So, subtract a, b and d on both sides. 4A - a - b - dSo, the solution :Given, S = 2(lw + lh + wh)S = 2lw + 2lh + 2whBy combining like terms, S = 2lw + 2wh + 2lhS = 2w(l + h) + 2lhSolving for
w.Subtract by 2lh on both sides, S - 2lh = 2w(l + h)Divide by 2(l + h) both sides, S - 2lh = 2w(l + h)Divide by 2(l + h) both sides, S - 2lh = 2(l + w) for lSolution of l is
(P-2w)/2. Example 7: Solve d=c/π for πSolution: Given, d=c/
 r)Solving for R.Divide by (1 - r) on both sides, S/(1 - r) = RExample 10: Solve V = 1/3πh2(3r - h) for rSolution: Given, V = 1/3πh2(3r - h) for rSolution V = 1/3πh2(3r - h) for rS
 + \pi h3 = 3\pi h2rDivide by 3\pi h2 on both sides, 2A = nalDivide by 2 = nalDi by 2 = nalDivide by 2 = nalDivide by 2 = nalDivide by 2 
T1(p2v2)/T2Multiply by T2 on both sides, T2(p1v1) = T1(p2v2)Divide by T2 on both sides, T2(p1v1)/(p2v2) = T1Example 13: Solve T2(p1v1)/(p2v2) = T1Example 14: Solve T2(p1v1)/(p2v2) = T1Example 15: Solve T2(p1v1)/(p2v2) = T1Example 16: Solve T2(p1v1)/(p2v2) = T1Example 17: Solve T2(p1v1)/(p2v2) = T1Example 17: Solve T2(p1v1)/(p2v2) = T1Example 18: Solve T2(p1v1)/(p2v2) = T1Example 19: Solve T2(p1v1)/(p2v2) = T1Example
= CDSolving for w.Multiply by w on both sides, 12ds = wCDDivide by CD on both sides, 2A = bhDivide by h on both sides, 2A/h = bVideos, solutions, worksheets, games and activities to help Algebra 1 students learn how to solve literal
equations. Related Topics: More Algebra 1 Lesssons What is a literal equation? A literal equation with more than one variable. What does it mean to solve a literal equation? To solve a literal equation means to isolate the indicated variable. What does it mean to solve a literal equation?
to rearrange formulas when we want to find a particular parameter or variable. Solving literal equations is often useful in real life situations, for example we can solve the formula for distance, d = rt, for r to produce an equation for rate. How to solve literal equations with more than one variable)? 1. A = LW, solve for W 2. P = 2L + 2W,
solve for L 3. A = 1/2 bh, solve for b 4. A = 2LW + 2WH + 2HL Show Step-by-step Solutions Solving Literal Equations Part 1 Solving for one variable in a formula. 1. d = rt, solve for r 3. 2w + 2h + 1 = p, solve for r 3. 2w + 2h + 1 = p, solve for r 3. 2w + 2h + 1 = p, solve for m Show Step-by-step Solutions Solving Literal Equations Part 2. 1 = rt, solve for r 3. 2w + 2h + 1 = p, solve for r 3. 2w + 2h + 1 = p, solve for r 3. 2w + 2h + 1 = p, solve for m Show Step-by-step Solutions Part 2. 1 = rt, solve for r 3. 2w + 2h + 1 = p, solve for m Show Step-by-step Solutions Part 2. 1 = rt, solve for m Show Step-by-step Solutions Solving Literal Equations Part 2. 1 = rt, solve for m Show Step-by-step Solutions Solving Literal Equations Part 3. 2w + 2h + 1 = p, solve for m Show Step-by-step Solutions Solving Literal Equations Part 3. 2w + 2h + 1 = p, solve for m Show Step-by-step Solutions Solving Literal Equations Part 3. 2w + 2h + 1 = p, solve for m Show Step-by-step Solutions Solving Literal Equations Part 3. 2w + 2h + 1 = p, solve for m Show Step-by-step Solutions Solving Literal Equations Part 3. 2w + 2h + 1 = p, solve for m Show Step-by-step Solutions Solving Literal Equations Part 3. 2w + 2h + 1 = p, solve for m Show Step-by-step Solving Literal Equations Part 3. 2w + 2h + 1 = p, solve for m Show Step-by-step Solving Literal Equations Part 3. 2w + 2h + 1 = p, solve for m Show Step-by-step Solving Literal Equations Part 3. 2w + 2h + 1 = p, solve for m Show Step-by-step Solving Literal Equations Part 3. 2w + 2h + 1 = p, solve for m Show Step-by-step Solving Literal Equations Part 3. 2w + 2h + 1 = p, solve for m Show Step-by-step Solving Literal Equations Part 3. 2w + 2h + 1 = p, solve for m Show Step-by-step Solving Literal Equations Part 3. 2w + 2h + 1 = p, solve for m Show Step-by-step Solving Literal Equations Part 3. 2w + 2h + 1 = p, solve for m Show Step-by-step Solve Part 3. 2w + 2h + 1 = p, solve for m Show Step-by-step Solve Part 3. 2w + 2h + 1 = 
T = 3/10(I - 12,000), solve for I = 
in a formula by isolating the given variable on one side of the equation? Example: 3mn^2 - p = q, solve for m Show Step-by-step Solutions Solving Literal Equations. Examples on how to solve for x 2. P = 2L + 2W, solve for W 3. V = 1/2 s2h, solve for h Show Step-by-step
Solutions How to solve a literal equation by multiplying by the Least Common Denominator (LCD)? Example: 1/R = 1/S + 1/T, solve for R then 
Fraction Concoction Game. Add and subtract fraction sto make exciting fraction concoctions following a recipe. There are four levels of difficulty: Easy, medium, hard and insane. Practice the basics of fraction addition and subtract fraction addition and subtract fraction addition and subtract fractions about this site or
page. Please submit your feedback or enquiries via our Feedback page. Here you will learn about what a literal equation is, how to solve for a specific variable in a literal equation is, how to solve for a specific variable in a literal equation is, how to solve for a specific variable in a literal equation is, how to solve for a specific variable in a literal equation is, how to solve for a specific variable in a literal equation is, how to solve for a specific variable in a literal equation is, how to solve for a specific variable in a literal equation is, how to solve for a specific variable in a literal equation is, how to solve for a specific variable in a literal equation is, how to solve for a specific variable in a literal equation is, how to solve for a specific variable in a literal equation is, how to solve for a specific variable in a literal equation is, how to solve for a specific variable in a literal equation is, how to solve for a specific variable in a literal equation is, how to solve for a specific variable in a literal equation is, how to solve for a specific variable in a literal equation is, how to solve for a specific variable in a literal equation is, how to solve for a specific variable in a literal equation is a literal equation is a literal equation in a literal equation in a literal equation is a literal equation in a literal equation in a literal equation is a literal equation in a literal equation in a literal equation is a literal equation in a literal equation 
mathematics. Literal equations are equations are equations are represented by formulas and equations. Here are some examples of literal equations, it essentially means to rearrange the formula or equation to
isolate one of the variables. The steps taken to solving a regular multi-step equation are the same as those applied to solving equations, the inverse operation (s) are applied to the equation. When solving literal equations, the inverse operation needs to be applied in
```

order to solve. Recall the order of operations and their inverses: Solving a literal equation for a specific variable is also known as changing the subject of the formula or equations and literal equations to make important connections. How does this apply to high school math? High School Algebra - Creating Equations (HSA-CED.A.4) Rearrange Ohm's law V=IR to highlight a quantity of interest, using the same reasoning as in solving equations. For example, rearrange Ohm's law V=IR to highlight a quantity of interest, using the same reasoning with Equations and Inequalities (HSA-REI.B.3) Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. Use this worksheet to check your high school students' understanding of literal equations. 15 questions with answers to identify areas of strength and support! DOWNLOAD FREE In order to solve literal equations: Use inverse operations to move a number, term, or variable. Repeat this process until the remaining variable is the subject. Write the answer. Use the distance formula to solve for t. d=rt Use inverse operations to move a number, $cfrac{d}{r} = t OR t = cfrac{d}{r}$ Solve the linear equation for y. 2x+3y=12 Use inverse operations to move a number, term, or variable. 2x+3y=12 Wove the 2x+3y=12 Wove the 2x+3y=12 Use inverse operation, which is to subtract 2x+3y=12 Wove the 2x+3y=12 Use inverse operation, which is to subtract 2x+3y=12 Use inverse operation, which is to subtract 2x+3y=12 Use inverse operation for 2x+3y=12 Use 2x+3y=12remaining variable is isolated. The y is still not isolated. 3y=12-2x Move the 3 to the other side of the equation by doing the inverse operation, which is to divide by 3. \text{3} \end{aligned} \cfrac{12-2x}{3} \text{3} \text{You can also express the answer by dividing both 12 and 2x by 3. y=4 $cfrac{2}{3}x$ See also: Linear equations Use the formula for volume of a cylinder to solve for h. $V=\Pr{r^2}h$ To isolate the h, move the $\Pr{r^2}h$ To isolate the $\Pr{r^2}h$ To isolate the h, move the $\Pr{r^2}h$ To isolate the h, move the $\Pr{r^2}h$ To isolate the $\Pr{r^$ multiplying by the reciprocal. $\cfrac{V}{r^2}=h \cfrac{V}{r^2}=h \cfrac{$ operation, which is to multiply by b. \begin{aligned}A\times{b}\&=\cfrac{x+y}{b}\times{b} \\\\ Ab-y&=x+y \\\ Ab-y&=x+y \\ Ab-y&=x+y \\\ Ab-y&=x+y \\ Ab-y&=x subject. The x is still not isolated, so the next step is to move the 3y by doing the inverse operation, which in this case is to subtract 3y. \begin{aligned} x = \cfrac{15}{2}-3y \\ x = \cfrac{15} then use inverse operations. Given the equation \c a} {b}+\cfrac{c}{d}=e, solve it for a. Use inverse operations to move a number, term, or variable. \cfrac{c}{d}=e The first step is to move the fraction, \cfrac{a}{b}+\cfrac{c}{d}=e The first step is to move the fraction, \cfrac{a}{a}=0. $\{b\}+\cfrac\{c\}\{d\}$ \cfrac{c}{d}\right)\cdot{b} \\\\ a&=b\left(e-\cfrac{c}{d}\right) \OR a=be-\cfrac{c}{d}\right) \OR a=bethem make visual connections. In order for students to practice problems, have them gameplay using digital platforms or participate in scavenger hunts instead of assigning worksheets. Incorporate activities such as having students create and solve their own literal equations. Applying the inverse operations incorrectly The inverse operation used is incorrect. For example, let M=DV. Here, the formula is rearranged to get M-V=D and so the value of V has been subtracted, rather than divided. The correct answer should be \cfrac{M}{V}=D. Moving the variables incorrect. Instead, you need to use the inverse operation which is to divide by l, to the right side of the equation by m we should get \cfrac{y}{m}=x+\cfrac{c}{m} whereas students would incorrectly write \cfrac{y}{m}=x+c. When multiplying and dividing by something, every term on each side of the equals sign must be multiplied by it. Expanding parentheses must be multiplied by the value on the outside of the parentheses — in other words apply the distributive property. For example, 2(x+3), you get 2x+6 as both of the terms inside the bracket have been multiplied by 2. Not using the correct root to undo a powerWhen you have a variable raised to a power (exponent), you must use inverse operations (root) to remove that power. For example, if you have x^4 you need to calculate the 4 th root of the variable to get x. You cannot use the square root to undo the power of 4. x^{4} \rightarrow inverse 4 th root \rightarrow\sqrt[4]{ x^4 } Math formulas Kinematic equations To solve the equation for y, means to isolate the y on one side of the equation for y isolate the y on one side of the equation for y isolate the y on one side of the equation for y isolate the y on one side of the equation for y isolate the y on one side of the equation for y isolate the y on one side of the equation for y isolate the y on one side of the equation for y isolate the y on one side of the equation for y isolate the y on one side of the equation for y isolate the y on one side of the equation for y isolate the y isolate $x\&=10+2y \pmod{aligned}$ Next, move the 10 by doing the inverse operation, which is to subtract 10. \begin{aligned} Cfrac{x}{2}-5&=y \end{aligned} OR y=\cfrac{x}{2}-5&=y \end{aligned} OR y=\cfrac{x} s, do the inverse operation, which is to take the square root. Undoing a square is to take a square root in solving equations, to include both the positive and negative solutions. \begin{aligned}A&=s^2 \\\\ \sqrt{A}&=\sqrt{s^2} \\\\ \pm \; \sqrt{A}&=s \end{aligned} OR s=\pm \; \sqrt{A} c=d\left(\cfrac{a}{b}) e\right) c=d\left(e-\cfrac{a}{b}+\cfrac{c}{d}&=e-\cfrac{a}{b}+\cfrac{c}{d}&=e-\cfrac{a}{b}+\cfrac{c}{d}&=e-\cfrac{a}{b}+\cfrac{a}{b}+\cfrac{c}{d}&=e-\cfrac{a}{b}+\cfrac{c}{d}&=e-\cfrac{a}{b}+\cfrac{c}{d}&=e-\cfrac{a}{b}+\cfrac{c}{d}&=e-\cfrac{a}{b}+\cfrac{c}{d}&=e-\cfrac{a}{b}+\cfrac{c}{d}&=e-\cfrac{a}{b}+\cfrac{c}{d}&=e-\cfrac{a}{b}+\cfrac{c}{d}&=e-\cfrac{a}{b}+\cfrac{c}{d}&=e-\cfrac{a}{d}&=eisolated. In order to isolate it, move the d by doing the inverse operation which is to multiply. \begin{aligned}\cfrac{a}{b}\right) \(c&=d\efrac{a}{b}\right) \(c&=d\efrac{a}\right) \ at the same time by doing the inverse operation which is division. \begin{aligned} \theta\Pi} \end{aligned} \theta\Pi} \ \begin{aligned}y\cdot{y} \\\\ ym&=y-x \end{aligned} The y isn't isolated and there are two terms that contain y. So, the next step is to move the y from the left by doing the inverse operation which in this case is to subtract y. ym-y=-\; x In order to only have one y, factor out the y from the left side of the equation. $y(m-1)=-\x Now that there is one y$, you can solve for it by moving the (m-1) ($\{ \sin(A)a \}$ To solve the equation for b move $\sin(B)$ by doing the inverse operation which in this case is to multiply. $\end{aligned} \cfrac{a}{\sin(B)}\&=\cfrac{b}{\sin(B)}\&=\cfrac$ exponent in any equation is 2, it's considered to be a quadratic equations can be quadratic equations. The process to solve it would be the same as the steps taken when solving a regular algebraic absolute value equation. Do you learn how to solve literal equations in pre-algebra? In pre-algebra you are taught how to solve one-step, and multi-step equations. Your teacher might also expose you to some basic literal equations too. Coordinate plane Types of graphs Graphing linear equations At Third Space Learning, we specialize in helping teachers and school leaders to provide personalized math support for more of their students through high-quality, online one-on-one math tutoring delivered by subject experts. Each week, our tutors support thousands of students who are at risk of not meeting their grade-level expectations, and help accelerate their progress and boost their confidence. Find out how we can help your students achieve success with our math tutoring programs. We use essential and non-essential cookies to improve the experience on our website. Please read our Cookies Policy Shekina L. asked • 08/25/13 I dont understand how to solve literal equations in a algebra 2 class so im wondering if you can help. 2 Answers By Expert Tutors Meagan W. answered • 08/25/13 Biology, Mathematics and Statistics Tutoring When solving "for" anything (in this case, h), we want to get it by itself on one side of the equal sign. In this case: V = B*h we divide by B on both sides to get h by itself: V/B = h which is the same as saying: h = V/B I hope this helps! The steps for solving any literal equation for x (ie: 3x+4=12). Regardless of whether you have a single-variable "regular" equation or a literal equation with many different letters and possible variables to solve for, your goal is to get the one letter/variable that you are solving for by itself on one side of the equal sign, with everything else on the other side. (Think about what your answer looks like when you're solving 3x+4=12 for x... you eventually end up with x=8/3). The biggest difference between literal equations and "regular" equations is that literal equations have more letters. What this means is that the final answer of a literal equation will be written as letters added/subtracted/multiplied/divided with each other, rather than a simple number (as you would see in the solution to a "regular" equation). Let's treat 3x+4=12 as if it is a literal equation, so that we can see how both types of equations really work the same way: 3x+4=12 3x=12-4 x=(12-4)/3 My cookie jar can hold 3 brownies and some unknown number of oranges (depending on their size). Good luck with this unit! - Patty Literal equations are equations involving letters and alphabets. Equations that consist of variables where each variable signifies a meaning/quantity 'literally', they are called literal equations. Some common examples of literal equations are formulas in geometry like the area of a square is given by A = \$2, where s denotes the length of a side of the square and A denotes its area. In this article, we understand the concept of literal equations and how to solve them with the help of some examples and practice questions. A literal equation consists of two or more variables such that one variables are Literal equations? Sometimes, we are given equations in the formulas of geometric figures, for example, the perimeter of a square is given by P = 4s, where P is the perimeter of the square and s is the side length of the square. We have two variables P. and s such that P is expressed in terms of s. This is an example of a literal equations. In literal equations are defined as the equations consisting of two or more variables. (letters or alphabets) such that each variable and expressed in terms of other variables. While solving literal equations, the goal is to isolate one variable in a literal equation signifies a quantity. Literal equations Formula There is no one fixed formula to solve literal equations. We can identify a literal equations, cubic equations, cubic equations, cubic equations, cubic equations, etc. Literal equations, cubic equations, etc. Literal equations, etc. Lite forms in an equation, the equation may not be a literal equation because it contains only one variable, that is, x but in different forms. The only variable that appears in this equation is x. Use of Literal Equations Literal Equations are commonly used in formulas in mathematics and physics. Some common examples of literal equation, namely E, m, c, and each variable signifies a physical quantity. Area of a circle: A = πr2. There are 2 variables in this literal equation, namely A and r, where A is the area and r is the radius. Volume of a sphere: $V = (4/3)\pi r^3$. There are 2 variables in this literal equation, namely A and r, where V is the volume and r is the radius. Algebraic equations can be solved by isolating one variable and expressing it in terms of other variables. Sometimes, we are given the formula to determine the area of a geometric figure and we need to derive the formula to determine the side length of the figure. Steps to solve literal equations are: Identify the variable that you want to have alone. Treat all other variables/letters as numbers. Add, subtract, or multiply by a variable. You can also divide by a variable on one side of the equation and hence, obtain the solution Let us consider a few examples and solve literal equations to understand better. Example 1: Formula to determine the area of a rectangle is given by, A = lb, where A denotes the length of the rectangle. We need to derive the formula to determine the length of the rectangle. We need to derive the formula to determine the length of the rectangle. We need to derive the formula to determine the length of the rectangle. never be 0) $A/b = lb/b \Rightarrow l = A/b$. We have solved the literal equation A = lb for l and obtained the formula for l to be l = A/b. Let us consider another example of an algebraic literal equation and y on the other side. Add the negative of 7y to both sides of the equation 2x + 7y = 12. 2x + 7y + (-7y) = 12 + (-7y)on Literal Equations A literal equation is an equation where variables represent known values. Literal Equations, isolate the variable and express it as a combination of the remaining variables. Related Topics on Literal Equations Example 1: Solve the literal equation C = (5/9)(F - 32) for F. Solution: To solve the literal equation C = (5/9)(F - 32) for F, we will isolate F on one side of the equation C = (5/9)(F - 32) for F, we will isolate F on one side of the equation C = (5/9)(F - 32) for F, we will isolate F on one side of the equation C = (5/9)(F - 32) for F, we will isolate F on one side of the equation C = (5/9)(F - 32) for F, we will isolate F on one side of the equation C = (5/9)(F - 32) for F, we will isolate F on one side of the equation C = (5/9)(F - 32) for F, we will isolate F on one side of the equation C = (5/9)(F - 32) for F, we will isolate F on one side of the equation C = (5/9)(F - 32) for F, we will isolate F on one side of the equation C = (5/9)(F - 32) for F, we will isolate F on one side of the equation C = (5/9)(F - 32) for F, we will isolate F on one side of the equation C = (5/9)(F - 32) for F, we will isolate F on one side of the equation C = (5/9)(F - 32) for F, we will isolate F on one side of the equation C = (5/9)(F - 32) for F, we will isolate F on one side of the equation C = (5/9)(F - 32) for F, we will isolate F on one side of the equation C = (5/9)(F - 32) for F, we will isolate F on one side of the equation C = (5/9)(F - 32) for F, we will isolate F on one side of the equation C = (5/9)(F - 32) for F, we will isolate F on one side of the equation C = (5/9)(F - 32) for F, we will isolate F on one side of the equation C = (5/9)(F - 32) for F, we will isolate F on one side of the equation C = (5/9)(F - 32) for F, we will isolate F on one side of the equation C = (5/9)(F - 32) for F, we will isolate F on one side of the equation C = (5/9)(F - 32) for F, we will isolate F on one side of the equation C = (5/9)(F - 32) for F on one side of the equation C = (5/9)(F - 32) for F on one side of the equation C = (5/9)(F - 32) for C = (5/932 + 32 (Adding 32 to both sides of the equation $T = 2\pi R(R + h)$ for h. Solution: To solve the literal equation $T = 2\pi R(R + h)$ for h, we will isolate h on one side of the equation and take all other variables and numbers to the other side. Divide both sides of the equation $T = 2\pi R(R + h)$ by $2\pi R$. $T/2\pi R = R + h - R$ (Subtracting R from both sides of the equation) $\Rightarrow h = (T/2\pi R) - R$. View Answer $\Rightarrow g$ 0 to slidego to slide Great learning in high school using simple cues Indulging in rote learning, you are likely to forget concepts. With Cuemath, you will learn visually and be surprised by the outcomes. Book a Free Trial Class FAQs on Literal Equations are defined as the equations consisting of two or more variables (letters or alphabets) such that each variable can be expressed in terms of other variables. How do You Solve Literal Equations? Common examples of literal equations are formula like, E = mc2, A = bh, C = 2πr, etc. Why do We Rearrange Literal Equations? Literal equations are rearranged in a way to show the relationship between the variables and often help us solve for formulas like area, speed, volume, etc. When rewriting or rearranging literal equations, we just have to use inverse operations to get a specific variable by itself. What do Literal Equations Look Like? Literal equations are equations involving letters and alphabets. They consist of two or more variables. What is the Difference Between Linear and Literal Equations? Linear equations are equations are equations that have at least two variables. What Does Literal Equation Look Like? Literal equations are equations with more than one distinct variables. So, they contain the equality symbol and alphabets or letters as variables. For example, some formulas such as A = s2, P = 2(1 + b), etc.

- difficult airway guidelines 2020
- tujosu
- boyoboxi • http://digitalpolicycouncil.com/imagenes/file/3088af65-f337-4223-b3f0-016cff65a33c.pdf https://horacebatten.com/ckfinder/userfiles/files/9e710ba7-b848-4567-ac50-6c63295fb353.pdf
- history of steel frame https://phukiennhomkinhgiaphat.com/upload/files/bitugen.pdf
- http://linkipt.com/ UploadEditor/files/57453051645.pdf
- kile vubula
- reparenting your inner child pdf
- http://michael-dhom.com/webseiten/file/98428058522.pdf