

Algebra 1
Unit 2, Lesson 4: Solving Literal Equations

Essential Question: How do I solve literal equations and formulas for a given variable?

Vocabulary:

Literal Equation	Formula

Literal Equations

1) Solve for ***x***:

$$x + k = f$$

2) Solve for ***a***:

$$\frac{a}{x} = b$$

3) Solve for ***m***:

$$x - m = r$$

4) Solve for ***z***:

$$x + z = r$$

5) Solve for ***x***:

$$\frac{x}{a} - b = c$$

6) Solve for ***x***:

$$ax - t = m$$

7) Solve for **y**. Then find the value of **y** when $x = -5$.

$$y + 3x = -11$$

8) Solve for **y**. Then find the value of **y** when $x = 6$.

$$3y - 6x = -9$$

9) Solve for **y**. Then find the value of **y** when $x = 2$.

$$6 = -2y + 5x$$

Formulas:

1) Solve for **b**: $A = \frac{1}{2}bh$ (Area of a triangle)

2) Solve for **r**: $C = 2\pi r$ (Circumference of a circle)

3) Solve for **W**: $P = 2L + 2W$ (Perimeter of a rectangle)

4) Solve for **t**: $D = rt$ (Linear motion)

5) Solve for **C**: $F = \frac{9}{5}C + 32$ (Temperature conversions)