

Use Formulas to Solve Problems

Using formulas to solve problems: Given a formula and a value for a variable(s), plug the value(s) into the formula and solve for the remaining variable. Follow order of operations when solving the formula.

Example 1: Given $^{\circ}\text{C} = \frac{5}{9} (^{\circ}\text{F} - 32)$

Convert 41°F to $^{\circ}\text{C}$

$$^{\circ}\text{C} = \frac{5}{9} (41 - 32)$$

$$^{\circ}\text{C} = \frac{5}{9} (9)$$

$^{\circ}\text{C} = 5$

Example 2: Given $A = \frac{1}{2}bh$ $b = 10$ $h = 7$

$$A = \frac{1}{2} (10)(7)$$

$$A = \frac{1}{2} (70)$$

$A = 35$

Try These:

Given $^{\circ}\text{C} = \frac{5}{9} (^{\circ}\text{F} - 32)$ **Convert to** $^{\circ}\text{C}$

1. 50°F

2. -4°F

3. 122°F

4. 32°F

5. 113°F

6. 59°F

Given $A = \frac{1}{2}bh$ **Find the Area**

7. $b = 15$ $h = 3$

8. $b = 5$ $h = 20$

9. $b = 20$ $h = 10$

10. $b = 12$ $h = 15$