

TEKS A.4.A



LESSON 2-5 Practice B
Solving for a Variable

Answer each of the following.

1. The formula $C = 2\pi r$ relates the radius r of a circle to its circumference C . Solve the formula for r .

$$C = 2\pi r$$

$$\frac{C}{2\pi} = r$$

$$r = \frac{C}{2\pi}$$

2. The formula $y = mx + b$ is called the slope-intercept form of a line. Solve this formula for m .

$$y = mx + b$$

$$y - b = mx$$

keep going

Solve each equation for the variable indicated.

3. $4c = d$ for c

4. $n - 6m = 8$ for n

5. $2p + 5r = q$ for p

Circle the variable you are solving for.

6. $-10 = xy + z$ for x

7. $\frac{a}{b} = c$ for b

multiply both sides by $\frac{b}{1}$

8. $\frac{h-4}{j} = k$ for j

multiply both sides by $\frac{j}{1}$

Answer each of the following.

Which side of the equal sign is it on?

9. The formula $c = 5p + 215$ relates c , the total cost in dollars of hosting a birthday party at a skating rink, to p , the number of people attending.

a. Solve the formula $c = 5p + 215$ for p .

- b. If Allie's parents are willing to spend \$300 for a party, how many people can attend?

Move all variable to the other side of the equal sign.

10. The formula for the area of a triangle is $A = \frac{1}{2}bh$, where b represents the length of the base and h represents the height.

a. Solve the formula $A = \frac{1}{2}bh$ for b .

- b. If a triangle has an area of 192 mm^2 , and the height measures 12 mm , what is the measure of the base?