

Solving Equations 2
Geometry

(KEY)

Solve, check, and graph the following equations.

1) $d + 17 = 33$

2) $z - 29 = 42$

3) $-3v = 45$

4) $\frac{(5)k}{5} = 9(5)$

$$\frac{-3v = 45}{-3 \quad -3}$$

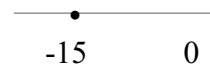
$$k = 45$$

$$v = -15$$

$$\sqrt{\frac{(45)}{5}} = 9$$

$$\begin{aligned} \checkmark -3(-15) &= 45 \\ 45 &= 45 \checkmark \end{aligned}$$

$$9 = 9 \checkmark$$



5) $x^2 = 9$

6) $\sqrt{m} = 8$

7) $p^2 = 49$

8) $\sqrt{a} = 5$

$$\sqrt{x^2} = \sqrt{9}$$

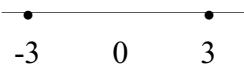
$$(\sqrt{m^2}) = (8)^2$$

$$x = \pm 3$$

$$m = 64$$

$$\begin{aligned} \checkmark (3)^2 &= 9 & (-3)^2 &= 9 \\ 9 &= 9 & 9 &= 9 \checkmark \end{aligned}$$

$$\begin{aligned} \checkmark \sqrt{(64)} &= 8 \\ 8 &= 8 \checkmark \end{aligned}$$



9) $-18 = t - 12$

10) $-42 = 7h$

11) $\frac{t}{-7} = -4$

12) $14 = -11 + k$

13) $3x + 7 = 19$

14) $\frac{x}{2} - 7 = 3$

15) $7x - 5 = 30$

16) $x^2 + 6 = 42$

$$\frac{-7 \quad -7}{3x = 12}$$

$$\frac{+7 \quad +7}{x/2 = 10}$$

$$2(x/2) = 10(2)$$

$$\frac{+5 \quad +5}{7x = 35}$$

$$\frac{-6 \quad -6}{x^2 = 36}$$

$$\sqrt{(x^2)} = \sqrt{(36)}$$

$$x = 4$$

$$x = 20$$

$$x = 5$$

$$x = \pm 6$$

$$\begin{aligned} \checkmark 3(4) + 7 &= 19 \\ 12 + 7 &= 19 \\ 19 &= 19 \checkmark \end{aligned}$$

$$\begin{aligned} \checkmark (20)/2 - 7 &= 3 \\ 10 - 7 &= 3 \\ 3 &= 3 \checkmark \end{aligned}$$

$$\begin{aligned} \checkmark 7(5) - 5 &= 30 \\ 35 - 5 &= 30 \\ 30 &= 30 \checkmark \end{aligned}$$

$$\begin{aligned} \checkmark (6)^2 + 6 &= 42 & \checkmark (-6)^2 + 6 &= 42 \\ 36 + 6 &= 42 & 36 + 6 &= 42 \\ 42 &= 42 \checkmark & 42 &= 42 \checkmark \end{aligned}$$

