

Equation and Inequality Practice

1) In the equation, speed = distance • time or $s = dt$, solve for t.

a) $t = ds$

b) $t = \frac{d}{s}$

c) $t = \frac{s}{d}$

d) $t = s$

2) Solve for c in the following formula.

$$K = \frac{1}{3} ct$$

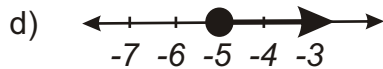
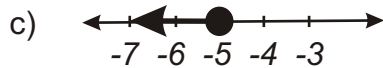
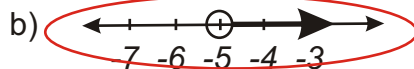
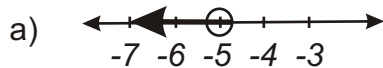
a) $c = \frac{3k}{t}$

b) $c = \frac{t}{3k}$

c) $c = \frac{1}{3} t$

d) $c = \frac{3t}{k}$

3) Which of the following shows the solution $-5x + 6 < 31$?



Solve for x. $\frac{2}{3}x - \frac{1}{2} = \frac{1}{4}x + 2$

a) $x = \frac{1}{2}$

b) $x = 5$

c) $x = 6$

d) $x = -4$

5) Mario paid \$4.50 for a pizza. Each pizza has 10 slices. If n equals the number of pizzas Mario buys, which equation below represents how many pizzas Mario can buy with \$27.00?

a) $10n + 4.50 = 27.00$

b) $n = 4.50 \times 10$

c) $4.50n = 27$

d) $\frac{n}{27} = 4.50$

6) Solve $6x + 4 = 8x - 8$

a) $x = 4$

b) $x = 6$

c) $x = -2$

d) $x = -8$

7) $6a + 3(5 - a) = 30$

a) $a = -6$

b) $a = 6$

c) $a = 5$

d) $a = 3$

8) Mrs. Smith purchased \$2,400 worth of furniture using her credit card. She is charged $2\frac{1}{2}\%$ interest monthly. How much interest will she be charged for one month?

a) \$600

b) \$60

c) \$80

d) \$ 300

9) Solve the following inequality

:

$$4x + 6 > -14$$

a) $x > -5$

b) $x > 5$

c) $x < -5$

d) $x < 5$

10) Lydia purchased 3 packs of cups for \$3.50 per pack. There are 50 cups in each pack. Which equation below represents the number of packs Lydia can buy with \$21.00? Let n = the number of packs purchased.

a) $3.50n = 21$

b) $21n = 3.50$

c) $50n = 21$

d) $3.50n + 10 = 21$

11) Solve for x .

$$5x + 4 = 2x + 7$$

a) $x = 2$

b) $x = 5$

c) $x = 3$

d) $x = 1$

12) Solve for x .

$$10x + 8 = -12$$

a) $x = 2$

b) $x = -2$

c) $x = 8$

d) $x = -8$