

## Adding and Subtracting Positive and Negative Numbers Date \_\_\_\_\_ Period \_\_\_\_\_

**Evaluate each expression.**

1)  $(-2) + 3$

2)  $(-14) + (-7)$

3)  $3 - (-8)$

4)  $(-9) + 14$

5)  $(-8) - (-2)$

6)  $5 + (-8)$

7)  $(-27) - 24$

8)  $(-41) + (-40)$

9)  $38 - (-17)$

10)  $(-44) + (-9)$

11)  $(-16) - (-36)$

12)  $(-6) - 24$

13)  $(-16) - 6 + (-5)$

14)  $15 - 13 + 2$

15)  $16 - (-13) - (-5)$

16)  $(-7) - (-2) - 9$

$$17) (-11) - (-14) + 7$$

$$18) 7 + (-1) + 12 - 7$$

$$19) 6 + (-7) + (-5) - (-2)$$

$$20) (-3) + 5 + (-5) + 12$$

$$21) (-11) - 8 + 1 - (-6)$$

$$22) 10 - (-10) - 7 - 5$$

$$23) 6 - 3.98$$

$$24) 5.8 + (-2.5)$$

$$25) 1.8 - (-3.7)$$

$$26) 7 - 2.8$$

$$27) (-0.8) + (-7.2) - 5.4$$

$$28) 1.7 - (-0.8) + 4.013$$

$$29) \left(-\frac{3}{2}\right) + \frac{8}{5}$$

$$30) \frac{7}{4} - \left(-\frac{1}{2}\right)$$

$$31) \left(-\frac{1}{5}\right) + \frac{7}{4}$$

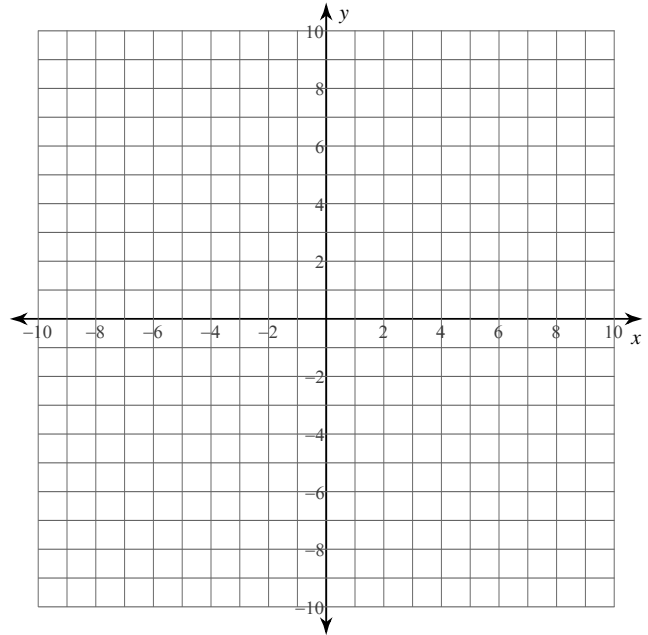
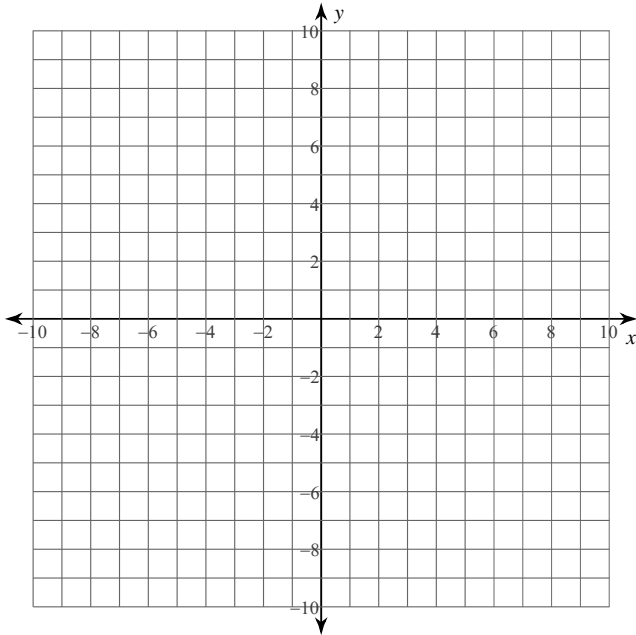
$$32) \frac{2}{5} - \frac{4}{5}$$

# Points in the Coordinate Plane

**Plot each point.**

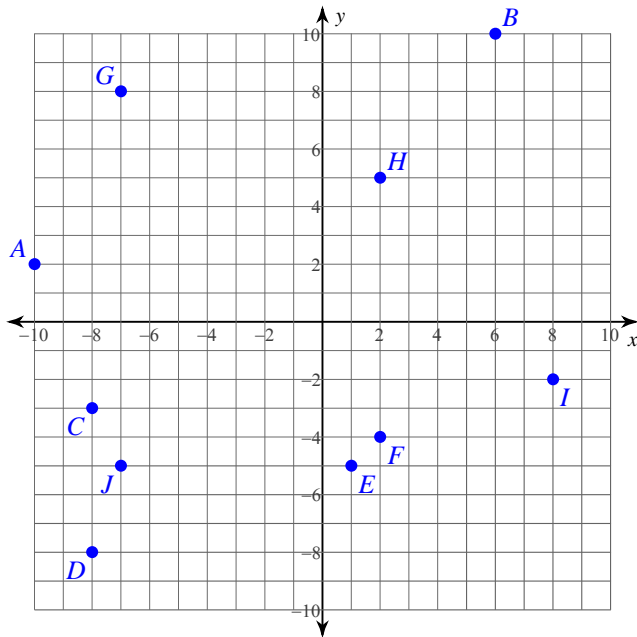
- 1)  $J(5, 10)$      $I(1, 9)$      $H(6, -9)$   
 $G(-6, 8)$      $F(9, 0)$      $E(-6, 0)$   
 $D(-8, -4)$      $C(5, 0)$      $B(-1, -1)$   
 $A(-8, -1)$

- 2)  $A(7, 10)$      $B(0, 4)$      $C(-1, 10)$   
 $D(-6, -6)$      $E(10, 0)$      $F(9, 7)$   
 $G(-3, -4)$      $H(-4, -9)$      $I(4, 1)$   
 $J(7, -9)$

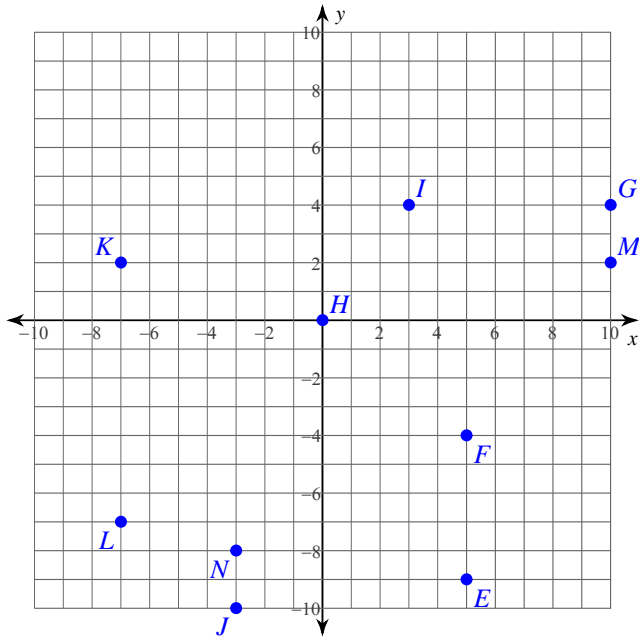


**State the coordinates of each point.**

3)



4)



**State the quadrant or axis that each point lies in.**

5)  $L(-2, 1)$     $K(-3, -2)$     $J(3, 1)$

6)  $T(-3, 5)$     $U(1, 0)$     $V(-5, 5)$

7)  $S(5, -7)$     $T(7, 2)$     $U(-5, 4)$

8)  $R(7, 0)$     $Q(8, -1)$     $P(3, 0)$

**Critical thinking questions:**

9) State the coordinates of the endpoints of a line segment that intersects the y-axis.

10) State the coordinates of the endpoints of a line segment that is not parallel to either axis, and does not intersect either axis.

## Solving Proportions

**Solve each proportion.**

1)  $\frac{10}{8} = \frac{n}{10}$

2)  $\frac{7}{5} = \frac{x}{3}$

3)  $\frac{9}{6} = \frac{x}{10}$

4)  $\frac{7}{n} = \frac{8}{7}$

5)  $\frac{4}{3} = \frac{8}{x}$

6)  $\frac{7}{b+5} = \frac{10}{5}$

7)  $\frac{6}{b-1} = \frac{9}{7}$

8)  $\frac{4}{m-8} = \frac{8}{2}$

9)  $\frac{5}{6} = \frac{7n+9}{9}$

10)  $\frac{4}{9} = \frac{r-3}{6}$

$$11) \frac{7}{9} = \frac{b}{b-10}$$

$$12) \frac{9}{k-7} = \frac{6}{k}$$

$$13) \frac{4}{n+2} = \frac{7}{n}$$

$$14) \frac{n}{n-3} = \frac{2}{3}$$

$$15) \frac{x-3}{x} = \frac{9}{10}$$

$$16) \frac{5}{r-9} = \frac{8}{r+5}$$

$$17) \frac{p+10}{p-7} = \frac{8}{9}$$

$$18) \frac{2}{8} = \frac{n+4}{n-4}$$

$$19) \frac{n-5}{n+8} = \frac{2}{7}$$

$$20) \frac{n-6}{n-7} = \frac{9}{2}$$

## Proportion Word Problems

Answer each question and round your answer to the nearest whole number.

- 1) If you can buy one can of pineapple chunks for \$2 then how many can you buy with \$10?
- 2) One jar of crushed ginger costs \$2. How many jars can you buy for \$4?
- 3) One cantaloupe costs \$2. How many cantaloupes can you buy for \$6?
- 4) One package of blueberries costs \$3. How many packages of blueberries can you buy for \$9?
- 5) Shawna reduced the size of a rectangle to a height of 2 in. What is the new width if it was originally 24 in wide and 12 in tall?
- 6) Ming was planning a trip to Western Samoa. Before going, she did some research and learned that the exchange rate is 6 Tala for \$2. How many Tala would she get if she exchanged \$6?
- 7) Jasmine bought 32 kiwi fruit for \$16. How many kiwi can Lisa buy if she has \$4?
- 8) If you can buy four bulbs of elephant garlic for \$8 then how many can you buy with \$32?
- 9) One bunch of seedlees black grapes costs \$2. How many bunches can you buy for \$20?
- 10) The money used in Jordan is called the Dinar. The exchange rate is \$3 to 2 Dinars. Find how many dollars you would receive if you exchanged 22 Dinars.

- 11) Gabriella bought three cantaloupes for \$7. How many cantaloupes can Shayna buy if she has \$21?
- 12) Jenny was planning a trip to the United Arab Emirates. Before going, she did some research and learned that the exchange rate is 4 Dirhams for every \$1. How many Dirhams would she get if she exchanged \$5?
- 13) Castel bought four bunches of fennel for \$9. How many bunches of fennel can Mofor buy if he has \$18?
- 14) If you can buy one fruit basket for \$30 then how many can you buy with \$60?

**Answer each question. Round your answer to the nearest tenth. Round dollar amounts to the nearest cent.**

- 15) Asanji took a trip to Mexico. Upon leaving he decided to convert all of his Pesos back into dollars. How many dollars did he receive if he exchanged 42.7 Pesos at a rate of  $\$5.30 = 11.1$  Pesos?
- 16) The currency in Argentina is the Peso. The exchange rate is approximately  $\$3 = 1$  Peso. At this rate, how many Pesos would you get if you exchanged \$121.10?
- 17) Mary reduced the size of a painting to a width of 3.3 in. What is the new height if it was originally 32.5 in tall and 42.9 in wide?
- 18) Molly bought two heads of cabbage for \$1.80. How many heads of cabbage can Willie buy if he has \$28.80?