

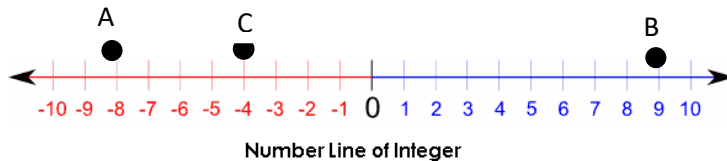
SOL 6.1 Ratios, 6.3 Integers, SOL 6.8 Coordinate Plane, SOL 6.12 Proportional Reasoning

6.3 - Integers

Write an integer to describe the situation.

- 1) The temperature increased 17 degrees from yesterday. _____
- 2) Jake lost 7 pounds for the wrestling tournament. _____

Write an integer for the points on the number line.



- 3) Point A is _____
- 4) Point B is _____
- 5) What is the absolute value of point C ? _____

Write the opposite of the integer.

- 6) -23 _____
- 7) 17 _____

Write the absolute value the integer

- 8) $|-16|$
- 9) $|7|$

Use $<$, $>$, or $=$ to compare the integers.

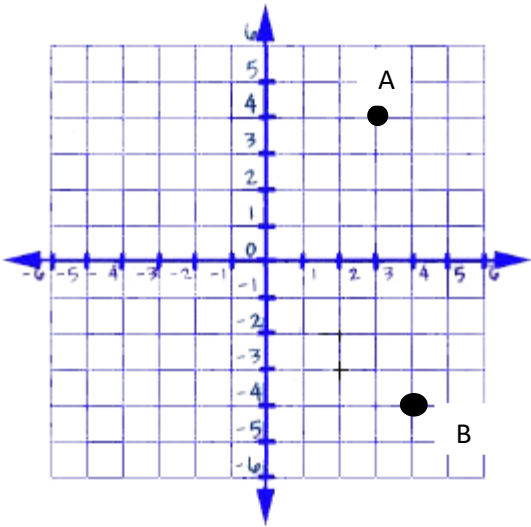
- 10) $|-3|$ _____ 0
- 11) -143 _____ $|43|$
- 12) -1038 _____ -1830
- 13) -153 _____ 1

Place these in order from least to greatest.

- 14) $0, 7, -14, 3, -7, 2, -3$ _____

6.8 – Coordinate Plane

Use the graph to answer questions 15 – 22.

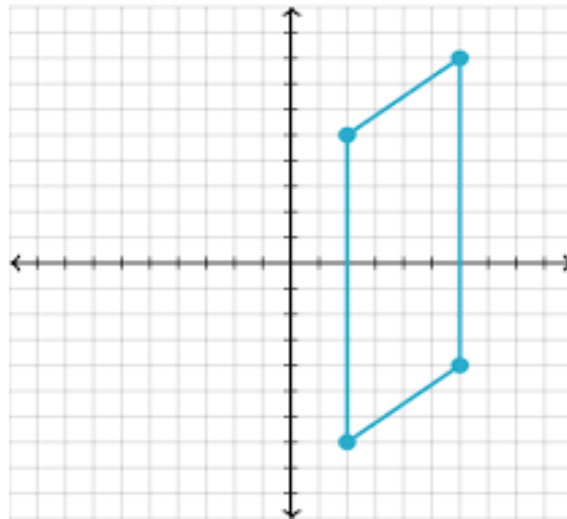


- 15) What are the coordinates of Point A? _____
- 16) How many units is point A from the x axis? _____
- 17) What are the coordinates of Point B? _____
- 18) What is the quadrant of Point B? _____
- 19) Graph Point C with coordinates of (-4, 3).
- 20) How many units is point C from the y axis? _____
- 21) Graph Point D with coordinates of (3, 0).
- 22) On which axis does Point D lie? _____

23) Look at the polygon on the graph provided.

What are the vertices of the polygon?

- a. (2,4) ; (2,-7) ; (7,8) ; (7,-4)
- b. (2,-7) ; (6,4) ; (6,8) ; (2,6)
- c. (2,-7) ; (2,5) ; (6,-4) ; (6,8)
- d. (7,2) ; (8,6) ; (2,5) ; (2,-7)



6.1 - Ratios

- 24) There are 40 apples in a bucket. 19 are golden delicious and the rest are gala apples. What is the ratio of gala apples to golden delicious? Write your answer in all three forms.
- 25) Kyle has 10 pieces of candy: 3 Reese Cups, 4 Snickers, and 3 Starbursts. What is the ratio of all the candy to Snickers? _____
- 26) The ratio of stars to squares is eight to four. Write one equivalent ratio.

27) Sarah has 9 markers. The colors are red, blue, green, yellow, black, brown, orange, pink, and purple. She separates them into two groups. One group is all the colors that start with the letter "b". What is the ratio of the colors starting with "b" to yellow?

6.12 Proportional Reasoning

Do these ratios form a proportion, write YES or NO

28) $\frac{4}{7}, \frac{8}{14}$

29) $\frac{1}{3}, \frac{2}{5}$

30) $\frac{17}{20}, \frac{9}{11}$

31) 15 minutes to drive 21 miles; 25 minutes to drive 35 miles

Solve each proportion.

32) $\frac{k}{8} = \frac{4}{32}$

33) $\frac{9}{10} = \frac{n}{50}$

34) $\frac{5}{16} = \frac{3}{w}$

Read the following problem. Set up a proportion and solve.

35) The Wildcats baseball team won 5 of their first 7 games this year. There are 28 games in the season. About how many games would you expect the Wildcats to win this season?

36)

Patrick's truck can drive 7.5 miles on one gallon of gas. Patrick makes this table to show how far his truck will travel on a tank of gas.

Gas Use	
Amount of Gas (gallons)	Distance (miles)
2	15
4	30
6	?
8	60

What number is missing from Patrick's table?
miles

37)

Jack and Betsy go to the grocery store and see a sign in the produce department that reads: Apples 10 lb. for \$4.00.

Betsy says, "The unit rate is 2.5 pounds of apples per dollar."
Jack disagrees. He says, "No, the unit rate is forty cents per pound."

Who is right?

- A Only Betsy
- B Both are right.
- C Only Jack
- D Neither are right.

38)

Avery is making chili for her sledding party and she has 11 cups of beans. The recipe says that 2 cups of beans feeds 6 people, so she makes this table to figure out how many people she can feed. Help Avery complete the table by matching the quantities to the correct places on the table.

Number of Cups	Number of People
2	6
	12
4	
11	24
	33

39)

The relationship between x and y is 3 to 2. Which table represents this relationship?

A

x	y
3	2
5	4
7	6
10	9

B

x	y
3	2
9	6
15	10
30	20

C

x	y
2	3
6	7
12	13
17	18

D

x	y
2	3
4	6
12	18
24	36