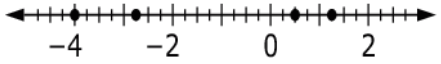
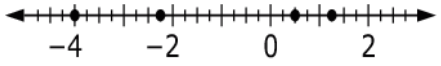
SBAC 6th Grade Practice Test Name:_____ Block:_____

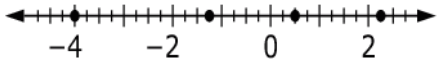
1

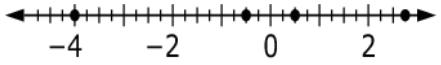
Which number line shows the correct locations of **all** the given values?

$\frac{1}{2}, -4, -2\frac{3}{4}, 1\frac{1}{4}$

Ⓐ 

Ⓑ 

Ⓒ 

Ⓓ 

2

The equation shown has an unknown number.

$$\square \div \frac{2}{3} = \frac{3}{4}$$

Enter a fraction that makes the equation true.

3

Sea level is 0 feet in elevation. The elevation of land represents its height above or below sea level. This table shows the lowest elevation in some states.

State	Lowest Elevation (ft)
Arizona	72
California	− 282
Louisiana	− 68
Tennessee	178

Determine whether each statement about the lowest elevations is correct. Select True or False for each statement.

	True	False
The elevation at the lowest point in California is higher than the lowest point in Louisiana.	☐	☐
The elevation at the lowest point in Tennessee is farther from 0 than the elevation at the lowest point of Louisiana.	☐	☐
The elevation at the lowest point in Louisiana is higher than the lowest point in California.	☐	☐

4

Carlos needs 1.7 meters of wire for one project and 0.8 meter of wire for another project.

Part A:
Shade the model to represent the total amount of wire Carlos needs. Each full row represents 1.0 meter.

Part B:
Carlos has 2.4 meters of wire. Does Carlos have enough wire?
- If he does, answer how much wire he will have left over.
- If he does **not**, answer how much more he needs.

Drag the value into one of the boxes.

0.1
0.2
0.3
0.4
0.5
0.9
1.6
2.5
3.2
4.1

Delete

Part A

Each full row = 1.0 meter

Part B

He will have ☐ meters of wire left over.

OR

He needs ☐ more meters of wire.

5

Consider the inequality $x > 7$.

Determine whether each value of x shown in the table makes this inequality true. Select Yes or No for each value.

	Yes	No
22	☐	☐
-7	☐	☐
13	☐	☐
5	☐	☐
-39	☐	☐

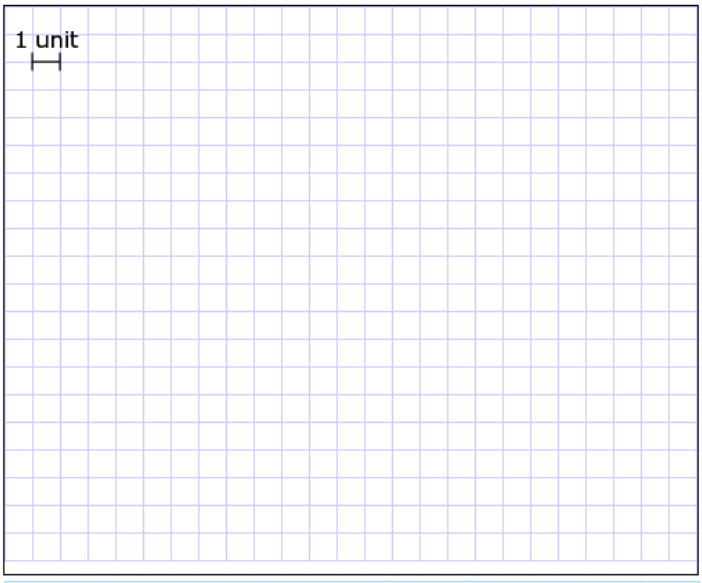
6

Micah constructs a rectangular prism with a volume of 360 cubic units. The height of his prism is 10 units.

Micah claims that the base of the prism must be a square.

Use the Connect Line tool to draw a base that shows Micah's claim is incorrect.

Delete Connect Line



7

Select **all** equations that have $x=3$ as a solution.

- [ ] $x+7=10$
- [ ] $3+x=3$
- [ ] $x \cdot 3=1$
- [ ] $4 \cdot x=12$

8

A recipe requires $\frac{3}{4}$ cup of nuts for 1 cake.

Enter the maximum number of cakes that can be made using $7\frac{1}{2}$ cups of nuts.

9

Divide.

$16{,}536 \div 24$

Enter the quotient.

10

Select **all** the expressions that are equivalent to $8(t+4)$.

- [ ] $2(4t+2)$
- [ ] $8t+32$
- [ ] $4t+4+4t$
- [ ] $(8+t)+(8+4)$
- [ ] $(8 \times t)+(8 \times 4)$

11

Look at the equation.

$\frac{2}{3} \times \frac{\square}{\square} = n$

Sarah claims that for any fraction multiplied by $\frac{2}{3}$, n will be less than $\frac{2}{3}$.

To convince Sarah that this statement is only sometimes true:

Part A: Drag one number into each box so the product, n, is less than $\frac{2}{3}$.

Part B: Drag one number into each box so the product, n, is **not** less than $\frac{2}{3}$.

1
2
3
4
5
6
7
8
9

Delete

Part A: **Product n is less than $\frac{2}{3}$**

$\frac{2}{3} \times \frac{\square}{\square} = n$

Part B: **Product n is not less than $\frac{2}{3}$**

$\frac{2}{3} \times \frac{\square}{\square} = n$

12

Enter the unknown value that makes this statement true:

30% of $\square$ is 60.

13

Carl types 180 words in 2 minutes.

Enter the number of words Carl types in 5 minutes at this rate.

14

Darcy likes to eat peanut butter and raisins on apple slices. On each apple slice she puts $\frac{1}{16}$ cup of peanut butter and 8 raisins.

Darcy has $\frac{2}{5}$ cup of peanut butter and 80 raisins. She eats a whole number of apple slices until the peanut butter is all gone. What fraction of the 80 raisins did she eat?

Enter the fraction in the response box.

15

Ms. Stone buys groceries for a total of $45.32. She now has $32.25 left.

Which equation could be used to find out how much money Ms. Stone had before she bought the groceries?

Ⓐ 45.32x$ = $32.25

Ⓑ x − $45.32 = $32.25

Ⓒ x + $45.32 = $32.25

Ⓓ x + $32.25 = $45.32

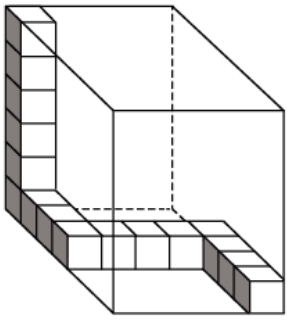
16

In the morning, Emily studied 40 minutes for a math exam. Later that evening, Emily studied for x more minutes.

Enter an **equation** that represents the total number of minutes, y, Emily studied for the math exam.

17

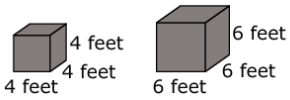
Brady started to fill the box shown with some unit cubes.



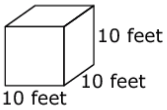
Enter the total number of unit cubes needed to completely fill the box.
Include the unit cubes already shown in your total.

18

Two shaded cubes are shown.



Ben states that the combined volume of these two shaded cubes is equal to the volume of this cube:



Part A: Select whether Ben's statement is true or false.

Part B: Drag numbers into the box to show the combined volume of the shaded cubes.

0 1 2 3 4 5 6 7 8 9

Delete

A. Ben's statement

True False

B. Combined volume

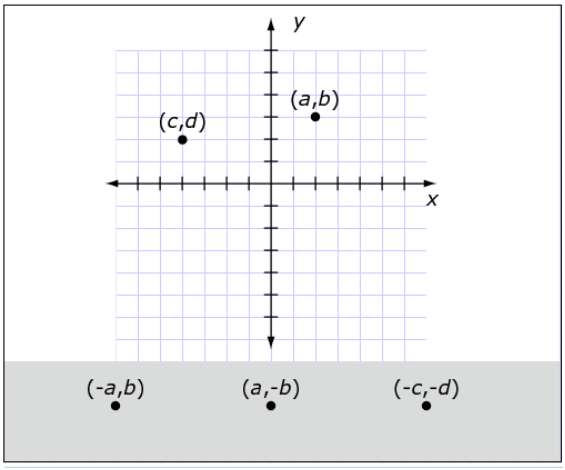
☐ cubic feet

19

Two ordered pairs are shown on a coordinate grid.

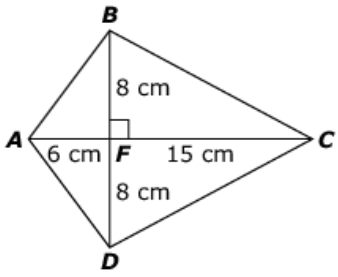
Drag each ordered pair to its correct location on the coordinate grid.

- $(-a, b)$
- $(a, -b)$
- $(-c, -d)$



20

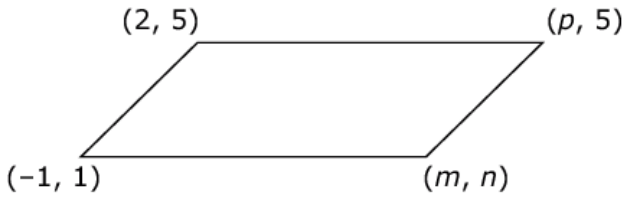
Consider this figure.



Enter the total area of figure *ABCD* in square centimeters.

21

The coordinates of this parallelogram are given.



Determine if each statement is True or False.

	True	False
The length of the longer side is $p - 2$.	☐	☐
The length of the longer side is $n + 1$.	☐	☐
The short side is 4 units in length.	☐	☐
$n = 5$	☐	☐
$m > n$	☐	☐
$p = 2$	☐	☐

22

The formula $C=\frac{5}{9}(F-32)$ is used to convert the temperature in degrees Fahrenheit (F) to the temperature in degrees Celsius (C).

Enter the temperature in degrees Celsius (C) equal to 113 degrees Fahrenheit (F).

23

A statistical question is one where you expect to get a variety of answers. Determine whether each question can be classified as a statistical question. Select Yes or No for each question.

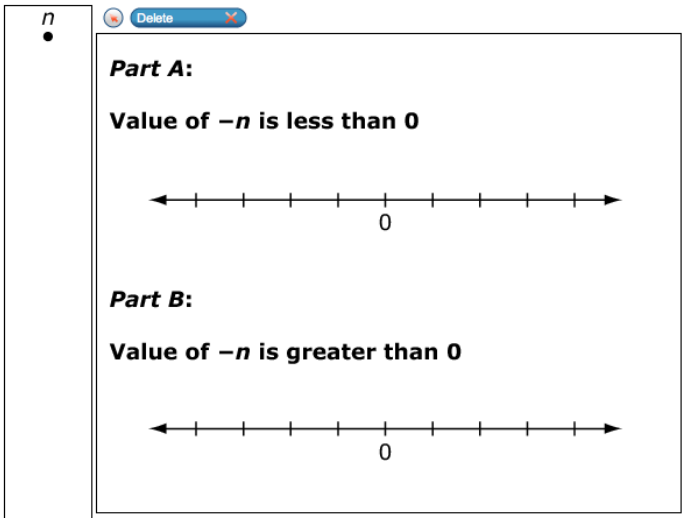
	Yes	No
How many hours a week do people exercise?	☐	☐
How many hours are there in a day?	☐	☐
How many rainbows have students seen this month?	☐	☐

24

Let n be an integer. Tracy claims that $-n$ must be less than 0. To convince Tracy that his statement is only sometimes true:

Part A:
Drag n to the number line so that the value of $-n$ is less than 0.

Part B:
Drag n to the number line so that the value of $-n$ is greater than 0.

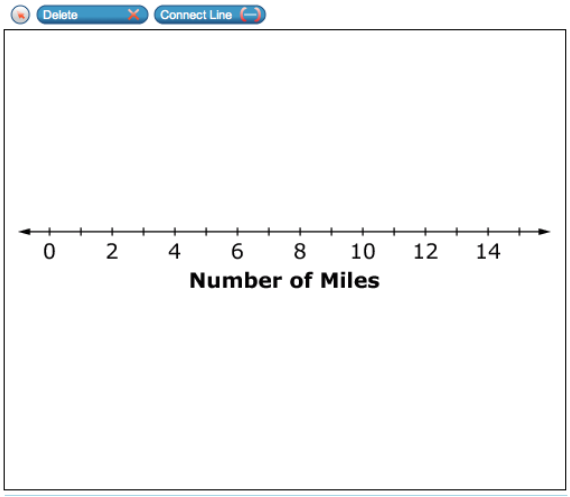


25

A boat takes 3 hours to reach an island 15 miles away.

The boat travels:
- at least 1 mile but no more than 6 miles during the first hour
- at least 2 miles during the second hour
- exactly 5 miles during the third hour

Use the Connect Line tool to show the range of miles the boat could have traveled during the **second** hour, given the conditions above.



26

Select the value that completes this expression for converting 10 yards to inches.

$$\left(\frac{10 \text{ yards}}{1}\right)\left(\square\right)\left(\frac{12 \text{ inches}}{1 \text{ foot}}\right)$$

Ⓐ $\frac{1 \text{ yard}}{36 \text{ inches}}$

Ⓑ $\frac{3 \text{ feet}}{1 \text{ yard}}$

Ⓒ $\frac{360 \text{ inches}}{10 \text{ yards}}$

Ⓓ $\frac{120 \text{ feet}}{10 \text{ inches}}$

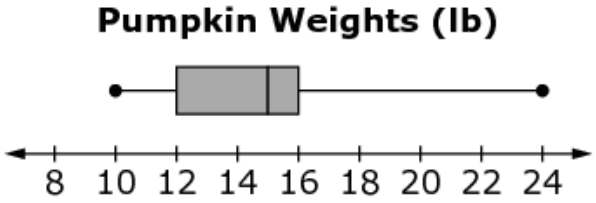
27

This table contains x and y values in equivalent ratios. Fill in the missing value in the table.

x	*y*
2	6
5	
7	21
9	27

28

Look at the box-and-whisker plot of pumpkin weights.



What is the **median** pumpkin weight?

Ⓐ 12 lb

Ⓑ 14 lb

Ⓒ 15 lb

Ⓓ 16 lb