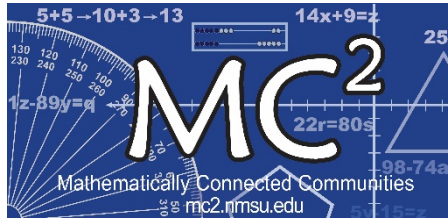# Mathematically Connected Communities

PARCC Practice Test Items
Grade 7 Mathematics

Excerpted 10/2016 from
PARCC Paper-Based and Computer-Based
Practice Tests*
https://parcc.pearson.com/practice-tests/math/

*Note PARCC Computer-Based Practices test items are located at the end
of each unit and are not numbered sequentially.

Mathematical Practice Questions for MC^2 Thinking Protocol

Use the MC^2 Thinking Protocol and follow the process below in working with the PARCC practice test items found in this packet:

1. Choose items from this packet that relate to math concepts studied in the current or previous curriculum units during your math instruction. Each item may be used as a practice item worksheet.
2. Choose a set of **Thinking/Writing Prompts** below based on the math practice the class is working to develop.
3. Add the prompts to the practice test item worksheet or display the prompts for the students to respond to.
4. Continue using the same set of prompts for an extended period of time so children develop competence and confidence in describing their mathematical thinking related to the math practice.

The questions below were intentionally not included on each MC^2 PARCC practice test item worksheet in this packet. These are intended to help students move beyond "answer getting" to fully making sense of test item questions and their own mathematical thinking.

Thinking/Writing Prompts to Promote Mathematical Practices

Math Practice 1: **Make sense of problems and persevere in solving them.**
1. What do you know about the problem?
2. What questions do you have?
3. Explain your reasoning or thinking in solving the problem.

Math Practice 3: **Construct viable arguments and critique the reasoning of others.**
1. What are the assumptions, definitions, and previous knowledge to help in thinking about this problem?
2. What are some possible conjectures that you have about the problem?
3. Explain your mathematical argument so that somebody else can make sense of your thinking.

Math Practice 4: **Model with mathematics.**
1. What are the important quantities in the problem that are needed to solve it?
2. What mathematical operation(s) or representation(s) will you use to solve the problem?
3. Explain how you know your answer makes sense in the context of the situation.

Math Practice 6: **Attend to precision.**
1. What are the important units in the problem? (What are we measuring or counting?)
2. What relationship between the units/quantities do you need to know in order to solve the problem?
3. Use appropriate and precise mathematical language, units, labels and computations to clearly describe your mathematical reasoning.

1. Which expressions are equivalent to $3\frac{1}{4} - \left(-\frac{5}{8}\right)$?

   Select **all** that apply.

   A. $3\frac{1}{4} - \left(\frac{5}{8}\right)$

   B. $3\frac{1}{4} + \left(\frac{5}{8}\right)$

   C. $3\frac{1}{4} + \left(-\frac{5}{8}\right)$

   D. $3\frac{1}{4} + \left(+\frac{5}{8}\right)$

   E. $-3\frac{1}{4} + \left(-\frac{5}{8}\right)$

   F. $-3\frac{1}{4} + \left(+\frac{5}{8}\right)$

2. At the start of the month, the value of an investment was $48.45. By the end of the month, the value of the investment changed by a loss of $13.80.

What was the value, in dollars, of the investment at the end of the month?

Enter your answer in the box.

3. This graph shows the relationship between the pounds of cheese bought at a deli and the total cost, in dollars, for the cheese.
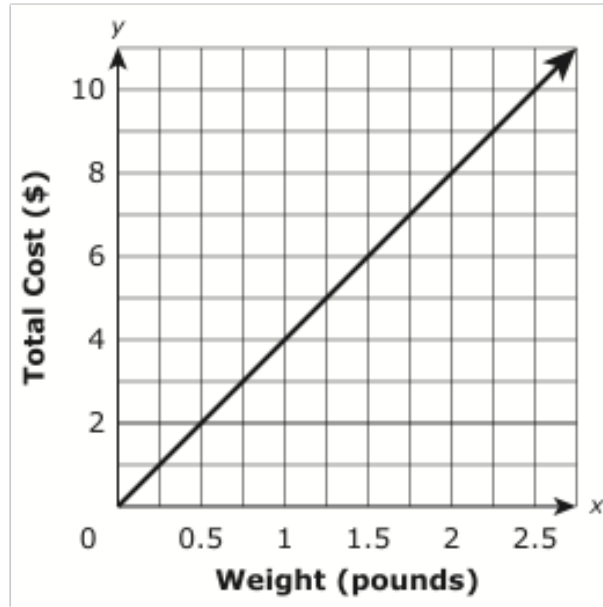
Select **each** statement about the graph that is true.

Select **all** that apply.

A. The point $(0, 0)$ shows the cost is $0.00 for 0 pounds of cheese.

B. The point $(0.25, 1)$ shows the cost is $0.25 for 1 pound of cheese.

C. The point $(0.5, 2)$ shows that 0.5 pound of cheese costs $2.00.

D. The point $(1, 4)$ shows the cost is $4.00 for 1 pound of cheese.

E. The point $(2, 8)$ shows that 8 pounds of cheese cost $2.00.

4. Which expression is equivalent to $\frac{1}{4}(8 - 6x + 12)$?

   A. $\frac{7}{2}x$

   B. $-\frac{13}{2}x$

   C. $-6x + 14$

   D. $-\frac{3}{2}x + 5$

5. In which situation could the quotient of $-24 \div 3$ be used to answer the question?

    A. The temperature of a substance decreased by 24°C per minute for 3 minutes. What was the overall change of the temperature of the substance?

    B. A football team lost 24 yards on one play, then gained 3 yards on the next play. How many total yards did the team gain on the two plays?

    C. Julia withdrew a total of $24 from her bank account over 3 days. She withdrew the same amount each day. By how much did the amount in her bank account change each day?

    D. A cookie jar contains 24 cookies. Each child receives 3 cookies. How many children are there?

6. A garden is 15 feet long by 5 feet wide. The length and width of the garden will each be increased by the same number of feet. This expression represents the perimeter of the larger garden:

$$(x + 15) + (x + 5) + (x + 15) + (x + 5)$$

Which expression is equivalent to the expression for the perimeter of the larger garden?

Select **all** that apply.

A. $4x + 40$

B. $2(2x + 20)$

C. $2(x + 15)(x + 5)$

D. $4(x + 15)(x + 5)$

E. $2(x + 15) + 2(x + 5)$

7. Which equation has a constant of proportionality equal to 4?

A. $4y = 4x$

B. $4y = 12x$

C. $3y = 4x$

D. $3y = 12x$

8. An airplane's altitude changed -378 feet over 7 minutes. What was the mean change of altitude in feet per minute?

Enter your answer in the box.

9. In which of these situations would the answer to the question be 0?

A. Teddy jumped into a pool from a diving board 8 feet above the water. He sank 8 feet and then swam straight up to the surface of the water. How many feet did Teddy swim?

B. Jerry left his house and walked 1.5 miles directly west. Then he walked 1.5 miles directly east. At this point, how many miles was Jerry from his house?

C. A trail begins at an elevation of −50 feet. The trail ends at an elevation of 50 feet. By how many feet does the elevation of the trail change from beginning to end?

D. The low temperature one day was −3° Celsius. The high temperature that day was 3° Celsius. What is the difference between the low temperature and the high temperature that day?

10. Jessica rented 1 video game and 3 movies for a total of $11.50.

- The video game cost $4.75 to rent.
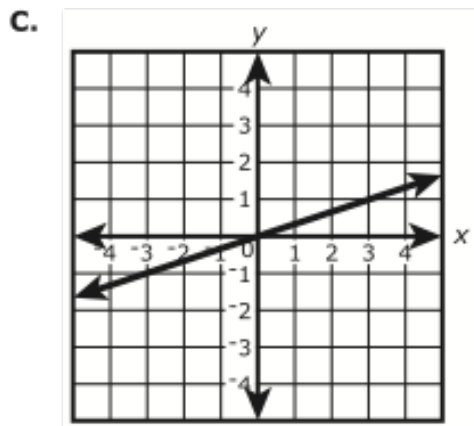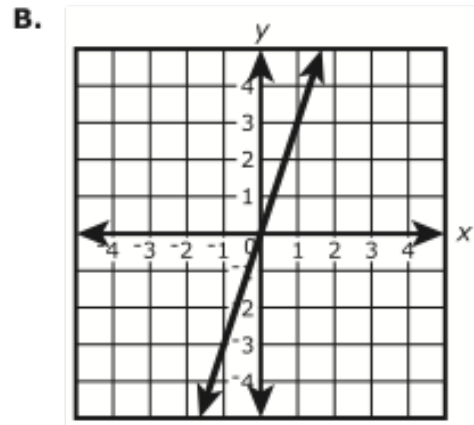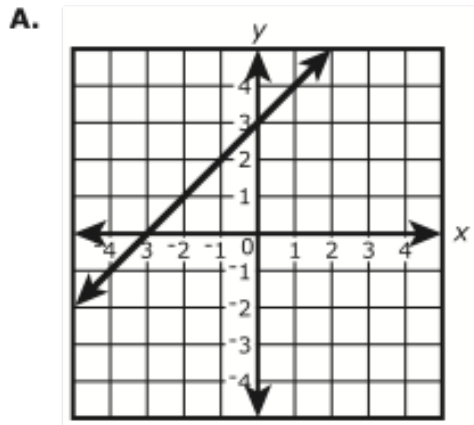- The movies cost the same amount each to rent.

What amount, in dollars, did Jessica pay to rent each movie?

Enter your answer in the box.

11. Which relationships have the same constant of proportionality between y and x as in the equation $y = \frac{1}{3}x$?

Select **each** correct answer.

A.

B.

C.

D.

x	−1.5	0	1.6	9.7
y	−4.5	0	4.8	29.1

E.

x	−5.4	−2.7	1.5	2.4
y	−1.8	−0.9	0.5	0.8

12. Which expressions have products that are positive?

Select **all** that apply.

A. $(-5)(0.2)(-9)$

B. $\left(\dfrac{2}{3}\right)\left(\dfrac{3}{2}\right)\left(-\dfrac{1}{2}\right)$

C. $(6)(-3)(8)(-7)$

D. $\left(-4\dfrac{1}{3}\right)\left(-\dfrac{1}{4}\right)\left(-5\dfrac{1}{2}\right)\left(-\dfrac{7}{9}\right)$

E. $\left(\dfrac{5}{6}\right)(-10)\left(3\dfrac{4}{5}\right)(2)$

F. $(-1.2)(-3.5)(2.7)(-0.8)$

13. Two equations are shown.

   • Equation 1: $-0.5x - 4 = 1.5$
   • Equation 2: $-0.5(x - 4) = 1.5$

   Select **each** statement that **must** be true.

   A. x represents a negative value in both equations.

   B. x represents a positive value in both equations.

   C. x represents a positive value in one equation and a negative value in the other equation.

   D. The value x represents in Equation 1 is less than the value x represents in Equation 2.

   E. The value x represents in Equation 1 is greater than the value x represents in Equation 2.

14. Hayden mixed 6 cups of blue paint with 8 cups of yellow paint to make green paint. To represent the relationship between the number of cups of blue paint, b, and the number of cups of yellow paint, y, needed to make the same shade of green paint, Hayden wrote the equation $b = \boxed{} y$.

What number should be placed in the box?

Enter your answer in the box.

15. Which expressions are equivalent to $-3 - (7.5 + 4)$?

Select **all** that apply.

A. $(7.5 + 4) - 3$

B. $-(7.5 + 4) - 3$

C. $-(7.5 + 4) + 3$

D. $-3 - (4 + 7.5)$

E. $-(3 - 7.5) + 4$

F. $-3 + (-7.5 - 4)$

G. $-3 + (-7.5 + 4)$

16. Which expressions are a factor of $-48xyz - 24xy + 40xyz$?

Select **all** that apply.

A. 4

B. 24

C. $3x$

D. $8y$

E. $2xy$

F. $6xy$

G. xyz

17. Josephine owns a diner that is open every day for breakfast, lunch, and dinner. She offers a regular menu and a menu with daily specials. She wanted to estimate the percentage of her customers who order specials. She selected a random sample of 50 customers who had lunch at her diner during a three-month period. She determined that 28% of these customers ordered from the menu with specials.

Which statement about Josephine's sample is true?

A. The sample is the percentage of customers who order daily specials.

B. The sample might not be representative of the population because it only included lunch customers.

C. The sample shows that exactly 28% of Josephine's customers ordered daily specials.

D. No generalizations can be made from this sample, because the sample size of 50 is too small.

Use the information provided to answer Part A and Part B for question 18.

A store owner paid $15 for a book. She marked up the price of the book by 40% to determine its selling price.

18. Part A

What is the selling price, in dollars, of the book?

Enter your answer in the box.

Part B

A customer buys a different book that has an original selling price of $38. The book is discounted 25%. The customer must pay a 6% sales tax on the discounted price of the book.

What is the total amount, in dollars, the customer pays for the discounted book?

Enter your answer in the box.

19. Sal exercised by stretching and jogging 5 days last week.

- He stretched for a total of 25 minutes during the **week**.
- He jogged for an equal number of minutes each of the 5 days.
- He exercised for a total of 240 minutes.

Elena also exercised by stretching and jogging 5 days last week.

- She stretched for 15 minutes each **day**.
- She jogged for an equal number of minutes each of the 5 days.
- She exercised for a total of 300 minutes.

Determine the number of minutes Sal jogged each day last week and the number of minutes Elena jogged each day last week. Show your work or explain all the steps you used to determine your answers.

Enter your answers and your work or explanation in the space provided.

20. Misha has a cube and a right-square pyramid that are made of clay. She placed both clay figures on a flat surface.

Misha will make slices through each figure that are parallel and perpendicular to the flat surface. Which statements are true about the two-dimensional plane sections that **could** result from one of these slices?

Select **all** that apply.

A. A plane section that is triangular could result from one of these slices through the cube.

B. A plane section that is square could result from one of these slices through the cube.

C. A plane section that is rectangular but not square could result from one of these slices through the cube.

D. A plane section that is triangular could result from one of these slices through the pyramid.

E. A plane section that is square could result from one of these slices through the pyramid.

F. A plane section that is rectangular but not square could result from one of these slices through the pyramid.

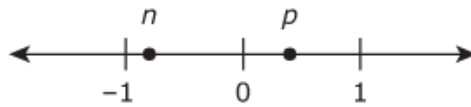**21.** The spinner shown is divided into 8 equal sections.
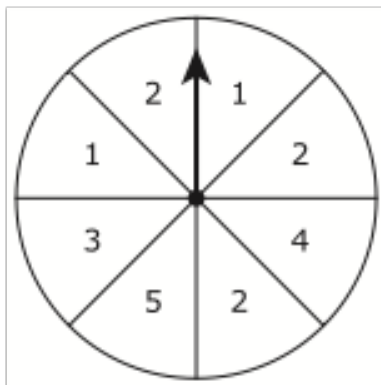
The arrow on this spinner is spun once.

What is the probability that the arrow will land on a section labeled with a number **greater** than 3?

A. $\frac{1}{8}$

B. $\frac{1}{4}$

C. $\frac{1}{3}$

D. $\frac{1}{2}$

Two numbers, n and p are plotted on the number line shown.

The numbers $n - p$, $n + p$, and $p - n$ will be plotted on the number line.

Select an expression from each drop-down menu to make this statement true.

The number with the least value is [Choose... ▼] , and the number with the greatest value is

[Choose... ▼] .

| n − p |
| n + p |
| p - n |

| n − p |
| n + p |
| p - n |

Which expressions are equivalent to $\frac{-5}{19}$?

Select **each** correct answer.

☐ A. $\frac{5}{19}$

☐ B. $-\frac{5}{19}$

☐ C. $\frac{-5}{-19}$

☐ D. $\frac{5}{-19}$

☐ E. $-\left(\frac{5}{19}\right)$

☐ F. $-\left(-\frac{5}{19}\right)$

Two equations are shown.

Equation 1: $\frac{2}{3}\left(x-6\right)=6$

Equation 2: $\frac{2}{3}y-6=6$

Solve each equation. Then, enter a number in each box to make this statement true.

The value of x is [ ] , and the value of y is [ ] .

The numbers of parts produced by three different machines are shown in the table.

Numbers of Machine Parts

Minutes	Machine Q	Machine R	Machine S
1	9	8	6
3	18	24	18
9	72	72	52

Only one of the machines produces parts at a constant rate. Write an equation that can be used to represent y, the number of parts produced in x minutes, for that machine.

Enter your equation in the space provided. Enter **only** your equation.

7th Grade PARCC Unit 1 COMPUTER-BASED Practice Test Item #15 (Non- Calculator): Standard 7.NS.1d

Select the correct number from each drop-down menu to complete the equation.

$$\frac{7}{8} - \left(-2 + \frac{3}{4}\right) = \left(\boxed{\text{Choose...} \blacktriangledown} + \boxed{\text{Choose...} \blacktriangledown}\right) + \frac{7}{8}$$

2	2
-2	-2
3/4	4/3
-4/3	-3/4

22. Reagan will use a random number generator 1,200 times. Each result will be a digit from 1 to 6. Which statement **best** predicts how many times the digit 5 will appear among the 1,200 results?

   A. It will appear exactly 200 times.

   B. It will appear close to 200 times but probably not exactly 200 times.

   C. It will appear exactly 240 times.

   D. It will appear close to 240 times but probably not exactly 240 times.

Use the information provided to answer Part A and Part B for question 23.

Rebecca and Megan are shopping at a store that sells jewelry, scarves, and purses. The cost of all the items at the store include tax.

23. Part A

Rebecca buys some scarves that cost $5 each and 2 purses that cost $12 each. The cost of Rebecca's total purchase is $39. Which equation can be used to find n, the number of scarves that Rebecca buys?

A. $5 + 24n = 39$

B. $5n + 24 = 39$

C. $(24 + 5)n = 39$

D. $24 \cdot 5 + n = 39$

Part B

Megan buys 3 bracelets and 3 necklaces. Each bracelet costs $5. Megan pays the clerk $40 and gets $4 change. What is the cost, in dollars, of one necklace?

Enter your answer in the box.

Use the information provided to answer Part A through Part D for question 24.

The directions on a bottle of vinegar say, "mix 1 cup of vinegar with 1 gallon of water to make a cleaning solution." The ratio of vinegar to water is 1 to 16.

24. Part A

How many **cups** of water should be mixed with $\frac{1}{4}$ cup of vinegar to make the cleaning solution?

Enter your answer in the box.

Part B

How many **fluid ounces** of vinegar should be mixed with 80 fluid ounces of water to make the cleaning solution?

Enter your answer in the box.

Use the information provided to answer Part A through Part D for question 24.

The directions on a bottle of vinegar say, "mix 1 cup of vinegar with 1 gallon of water to make a cleaning solution." The ratio of vinegar to water is 1 to 16.

Part C

The bottle contains 1 quart of vinegar.

What is the **total number of quarts of cleaning solution** that can be made using the entire bottle of vinegar?

Enter your answer in the box.

Part D

A spray bottle holds up to 1 cup of the cleaning solution.

When the spray bottle is full, what fraction of the cleaning solution is vinegar?

A. $\frac{1}{17}$

B. $\frac{1}{16}$

C. $\frac{15}{16}$

D. $\frac{16}{17}$

25. Chris made at least one error as she found the value of this expression.

$$2(-20) + 3\left[\frac{5}{4}(-20)\right] + 5\left[\frac{2}{5}(50)\right] + 4(50)$$

Step 1: $2(-20) + 3(-25) + 5(20) + 4(50)$

Step 2: $(3 + 2)(-20 + -25) + (5 + 4)(20 + 50)$

Step 3: $5(-45) + 9(70)$

Step 4: $-225 + 630$

Step 5: 405

Identify the step in which Chris made her first error. After identifying the step with the first error, write the corrected steps and find the final answer.

Enter the identified step, your work, and the final answer in the space provided.

26. A train traveled $\frac{1}{5}$ of the distance between two cities in $\frac{3}{4}$ hour.

At this rate, how many hours will it take the train to travel the entire distance between these two cities?

A. $\frac{3}{20}$

B. $\frac{4}{15}$

C. $3\frac{3}{4}$

D. $6\frac{2}{3}$

27. A scientist planted seeds in 4 sections of soil for an experiment. Not all of the seeds grew into plants. After 20 days, the scientist counted the number of plants in each of the 4 sections. The results are shown in the table.

Plant Experiment

Section	Size of Section (square feet)	Number of Plants
1	25	13
2	100	38
3	125	47
4	150	62

- Use the data in the table to determine approximately how many plants grew per square foot.

- Explain or show how you determined your approximation.

- Let y be the number of plants expected to grow in x square feet. Write an equation the scientist could use to model the relationship between y and x.

Enter your approximation, explanation, and equation in the space provided.

Use the information provided to answer Part A and Part B for question 28.

Point *P* is plotted on the number line.

28. Part A

Point *Q* is the opposite of point *P*. Determine the location of point *Q* on the number line. Explain how you determined the location of point *Q* on the number line.

Enter your answer and your explanation in the space provided.

Part B

Point *S* is located at $\frac{5}{4}$ on the number line. A student claims that the location of point *S* is to the right of the location of point *P* on the number line.

- Explain whether the student's claim is correct or incorrect.
- Write an inequality that describes the relationship between the value of point *P* and the value of point *S*.

Enter your explanation and your inequality in the space provided.

Use the information provided to answer Part A and Part B for question 29.

The scale on a map shows that 5 centimeters = 2 kilometers.

29. Part A

What number of centimeters on the map represents an actual distance of 5 kilometers?

Enter your answer in the box.

Part B

What is the actual number of kilometers that is represented by 2 centimeters on the map?

Enter your answer in the box.

A $4\frac{1}{2}$ -ounce hamburger patty has $25\frac{1}{2}$ grams of protein, and 6 ounces of fish has 32 grams of protein. Determine the grams of protein per ounce for each type of food.

Select from the drop-down menus to correctly complete each statement.

A hamburger patty has approximately [Choose... ▼] grams of protein per ounce.

.2
4.5
5.7
21.0
25.5

The fish has approximately [Choose... ▼] grams of protein per ounce.

.2
5.3
6.0
26.0
32.0

Consider the inequality $5x < 30$.

Part A

Natalia says that any value of x less than 25 makes the inequality true.

- Use a specific example to disprove Natalia's statement.
- Explain why your example disproves her statement.

Enter your example and your explanation in the space provided.

▼ Math symbols

+	−	×	÷
±	−	·	/
=	≠		
y^x	√	∛	π
(·)	°	|·|

▶ Relations
▶ Geometry

Part B

Describe in words all values of x that make the inequality true. Explain your answer.

Enter your description and your explanation in the space provided.

▼ Math symbols

+	−	×	÷
±	−	·	/
=	≠		
y^x	√	∛	π
(·)	°	|·|

▶ Relations
▶ Geometry

30. Rosy waxes $\frac{2}{3}$ of her car with $\frac{1}{4}$ bottle of car wax.

At this rate, what fraction of the bottle of car wax will Rosy use to wax her entire car?
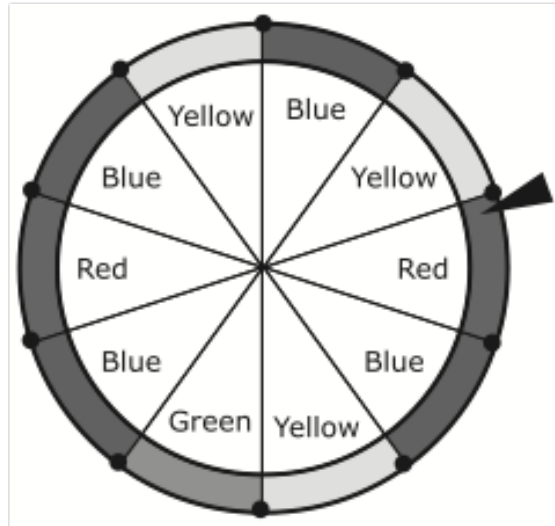
A. $\frac{1}{8}$

B. $\frac{1}{6}$

C. $\frac{3}{8}$

D. $\frac{3}{4}$

31. Part A

A game at a carnival has 4 colors on a wheel, as seen in the diagram. Each section of the wheel is the same size.

Lori wants to design a computer simulation to study how many spins it takes to land on each color once. Using the digits 0 through 9, she will assign a digit to each section of the wheel. Which option describes how the digits can be assigned?

A. Assign the digit 0 to blue, 1 to yellow, 2 to red, and 3 to green.

B. Assign the digit 4 to blue, 3 to yellow, 2 to red, and 1 to green.

C. Assign the digits 0, 1, and 2 to blue; 3, 4, and 5 to yellow; 6, 7, and 8 to red; and 9 to green.

D. Assign the digits 0, 1, 2, and 3 to blue; 4, 5, and 6 to yellow; 7 and 8 to red; and 9 to green.

Part B

Lori designs a computer simulation with 25 trials and uses the data from the simulation to create a graph. The graph shows the relative frequency of the number of spins in her simulation to land on each color once. Using the graph, what is the probability that a player lands on each color once in less than 7 spins?
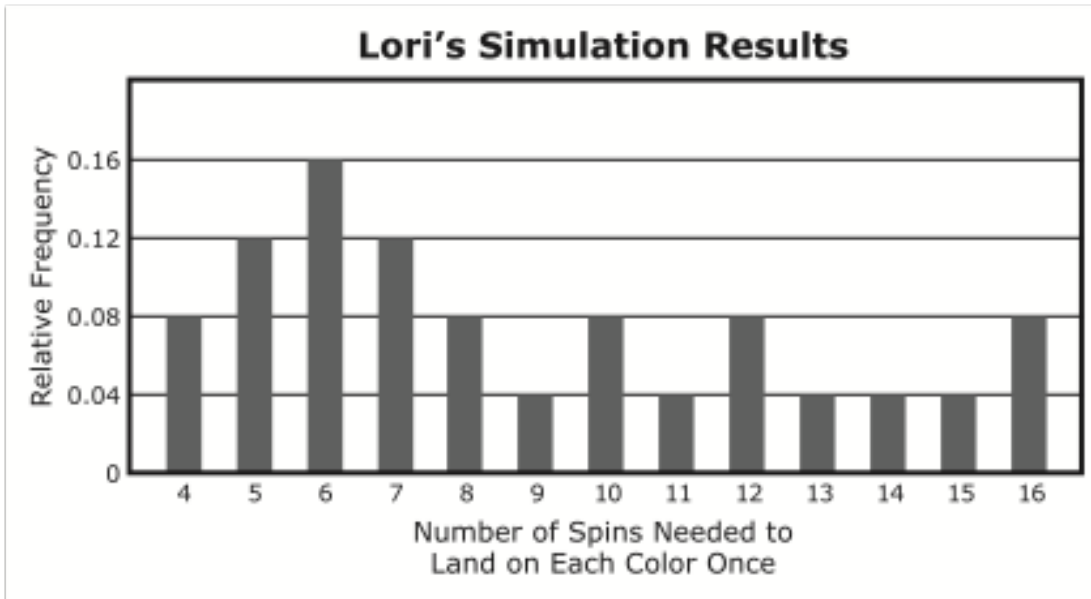
Lori's Simulation Results

Enter your answer in the box.

32. Consider the equation $5 + x = n$.

What must be true about any value of x if n is a negative number? Explain your answer. Include an example with numbers to support your explanation.

Enter your answer, your explanation, and your example in the space provided.

33. Alexis chose a random sample of 10 jars of almonds from each of two different brands, X and Y. Each jar in the sample was the same size. She counted the number of almonds in each jar. Her results are shown in the plots.

Brand X

Number of Almonds

Brand Y
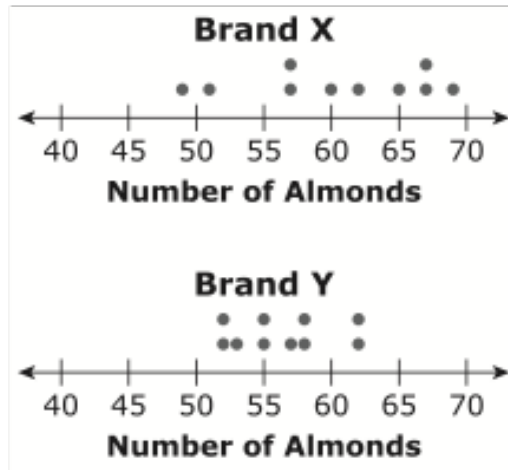
Number of Almonds

Based on the plots, which statement **best** compares the number of almonds in the jars from the two brands?

A. The number of almonds in jars from Brand X tends to be greater and more consistent than those from Brand Y.

B. The number of almonds in jars from Brand X tends to be greater and less consistent than those from Brand Y.

C. The number of almonds in jars from Brand X tends to be fewer and more consistent than those from Brand Y.

D. The number of almonds in jars from Brand X tends to be fewer and less consistent than those from Brand Y.

Use the information provided to answer Part A and Part B for question 34.

A circular mirror has a diameter of 12 inches.

34. Part A

What is the area, in square inches, of the mirror?

A. 6π

B. 12π

C. 36π

D. 72π

Part B

A circular frame that is 3 inches wide surrounds the mirror.

What is the combined area, in square inches, of the circular mirror and the frame?

A. 9π

B. 18π

C. 54π

D. 81π

Use the information provided to answer Part A and Part B for question 35.

A worker has to drive her car as part of her job. She receives money from her company to pay for the gas she uses. The table shows a proportional relationship between y, the amount of money that the worker receives, and x, the number of work-related miles driven.

Mileage Rates

Distance Driven, x (miles)	Amount of Money Received, y (dollars)
25	12.75
35	17.85
40	20.40
50	25.50

35. Part A

Explain how to compute the amount of money the worker receives for any number of work-related miles. Based on your explanation, write an equation that can be used to determine the total amount of money, y, the worker receives for driving x work-related miles.

Enter your explanation and your equation in the space provided.

Part B

On Monday, the worker drove a total of 134 work-related and personal miles. She received $32.13 for the work-related miles she drove on Monday. What percent of her total miles driven were work-related on Monday? Show or explain your work.

Enter your answer and your work or explanation in the space provided.

36. A right triangle has legs measuring 4.5 meters and 1.5 meters.

The lengths of the legs of a second triangle are proportional to the lengths of the legs of the first triangle.

Which could be the lengths of the legs of the second triangle?

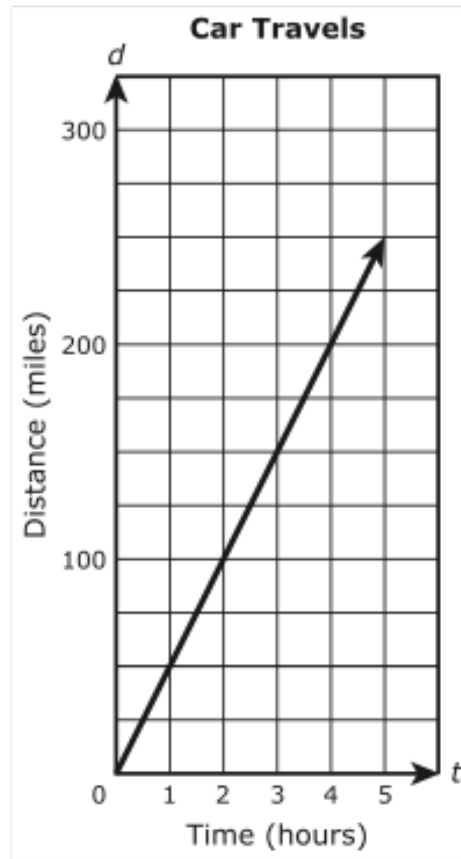Select **each** correct pair of lengths.

A. 6 m and 2 m

B. 8 m and 5 m

C. 7 m and 3.5 m

D. 10 m and 2.5 m

E. 11.25 m and 3.75 m

37. Part A

The graph shows the distance in miles, d, a car travels in t hours.

Car Travels

Explain why the graph does or does not represent a proportional relationship between the variables d and t.

Enter your explanation in the space provided.

Part B

Two cars leave from the same city at the same time and drive in the same direction. The table shows the distances traveled by each car.

Two Cars Travel		
Hours of Travel	Miles Traveled by Red Car	Miles Traveled by White Car
1	77	55
2	122	110
3	167	165
4	212	220
5	257	275

- Determine whether the relationship between the number of hours traveled and the number of miles traveled is proportional for each car.
- Use the table to explain how you determined your answers.
- Describe how the graph of the distance traveled by each car would support your answers.

Enter your answers and your explanations in the space provided.

Use the information provided to answer Part A and Part B for question 38.

A teacher surveyed students in four classes to determine the location for a field trip. Each student chose only one location. The table shows the number of students from each class who chose each location.

Field Trip Choices

Class	Number of Students Who Chose the Zoo	Number of Students Who Chose the Museum	Number of Students Who Chose the Planetarium
Class E	10	9	8
Class F	8	11	11
Class G	12	8	5
Class H	6	10	8

38. Part A

Determine the percent of students in each class who chose the museum. What is the order, from **least** to **greatest**, of the percents for each class?

A. Class E, Class F, Class G, Class H

B. Class G, Class E, Class F, Class H

C. Class G, Class E, Class H, Class F

D. Class H, Class F, Class E, Class G

Part B

The total number of students who chose the zoo is how many times as great as the total number of students who chose the planetarium?

A. 1

B. $1\frac{1}{18}$

C. $1\frac{1}{8}$

D. $1\frac{1}{9}$

Lindsey would like to know the number of people at a movie theater who will buy a movie ticket and popcorn. Based on past data, the probability that a person who is selected at random from those who buy movie tickets will also buy popcorn is 0.6. Lindsey designs a simulation to estimate the probability that exactly two in a group of three people selected randomly at a movie theater will buy both a movie ticket and popcorn. For the simulation, Lindsey uses a number generator that generates random numbers.

- Any number from 1 through 6 represents a person who buys a movie ticket and popcorn.
- Any number from 7 through 9 or 0 represents a person who buys only a movie ticket.

For each trial, Lindsey generates three numbers. Lindsey ran 30 trials of the simulation and recorded the results in the following table:

266	342	847	672	567
268	252	465	429	573
100	818	139	730	910

Part A

In the simulation, one result was "100." What does this result simulate?

○ A. No one in a group of three randomly chosen people who buy movie tickets also buys popcorn.

○ B. Exactly one person in a group of three randomly chosen people who buy movie tickets also buys popcorn.

○ C. Exactly two people in a group of three randomly chosen people who buy movie tickets also buy popcorn.

○ D. All three people in a group of three randomly chosen people who buy movie tickets also buy popcorn.

Part B

Use the results of the simulation to estimate the probability that exactly two of three people selected at random from those who buy movie tickets will also buy popcorn.

Enter your answer in the space provided. Enter **only** your answer.