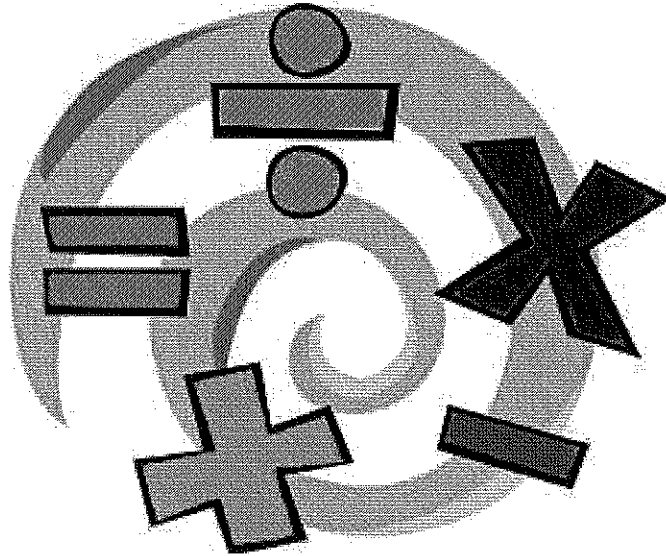


**7th Grade SC READY Like
Math Summative Assessment #2
Non-Calculator Section**



Student Name

Answer Key

Date

48. The table below shows the numbers of game chips of different colors in a bag.

Chips in a Bag	
Chip Color	Number of Chips
Yellow	8
Green	5
Blue	4
Red	3

Danielle randomly selects one chip from the bag. Which statement about the selection is true?

- A. The probability of selecting a red chip is $\frac{1}{3}$.
- B. Selecting a yellow, green or blue chip is certain.
- C. The probability of selecting a green chip is $\frac{1}{20}$.
- D. Selecting a blue or red chip is less likely than selecting a yellow chip.

Handwritten work for question 48:

$$\frac{\text{blue or red}}{20} < \frac{\text{yellow}}{20}$$

The fraction $\frac{7}{20}$ is written above the line, with "blue or red" written above it. The fraction $\frac{8}{20}$ is written to the right, with "yellow" written above it.

49. Charlene has 12 plastic cups. Of the 12 plastic cups, 3 are green, 4 are red, and 5 are blue. She stacks the cups into a single stack in random order. What is the probability that the cup on top of the stack is **not** green?

- A. $\frac{1}{4}$
- B. $\frac{2}{5}$
- C. $\frac{2}{3}$
- D. $\frac{3}{4}$

Handwritten work for question 49:

$$\frac{9}{12} \text{ or } \frac{3}{4}$$

The fraction $\frac{9}{12}$ is written to the left of the word "or". To the right of "or" is a boxed-in fraction $\frac{3}{4}$.

50. A package of Little Bites dog cookies costs \$9.20. Which equation can be used to find the total cost, c , of p packages of dog cookies?

- A. $c = p + 9.20$
- B. $c = p - 9.20$
- C. $c = \frac{p}{9.20}$
- D. $c = 9.20p$

51. Which rational numbers when multiplied by $-\frac{1}{2}$ will result in a positive rational number as the product? Why?

- A. any negative rational number because the product of two negative rational numbers is a positive rational number
- B. any even rational number because the product of a rational number and an even rational number is a positive rational number
- C. any rational number greater than $\frac{1}{2}$ because the product of two rational numbers takes the sign of the greater rational number
- D. any rational number greater than 0 because the product of a negative rational number and a positive rational number is a positive rational number

52. 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.

$$-378 \div 7 = -54$$

53. Alicia shoots a basketball at a hoop 100 times. She hits the backboard and misses with $\frac{2}{5}$ of her shots, hits the rim and misses with 32% of her shots, and makes a basket with the rest of her shots.

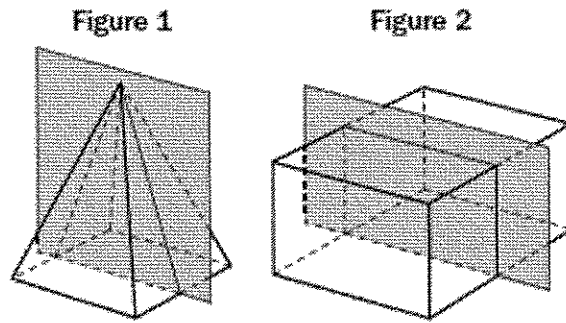
How many baskets does she make?

- A. 68
- B. 40
- C. 32
- D. 28

$$\frac{2}{5} = \frac{40}{100} \text{ or } 40\%$$

$$100 \text{ times} - 32 \text{ times} - 40 \text{ times} = 28 \text{ baskets}$$

54. Figure 1 is a right rectangular pyramid, and Figure 2 is a right rectangular prism.

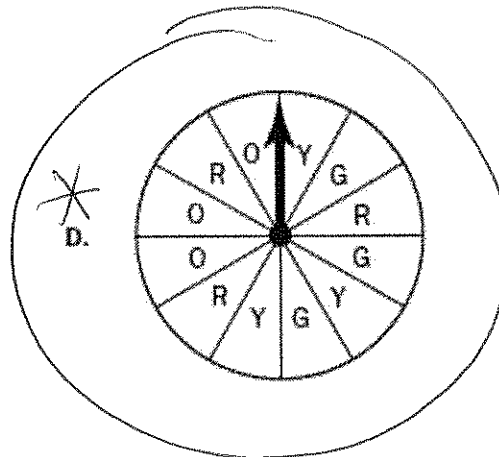
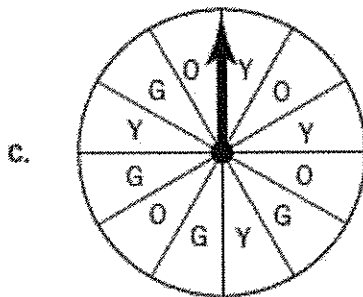
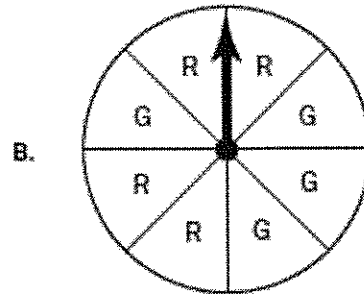
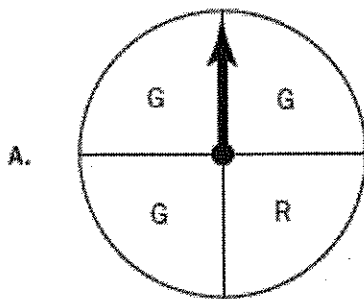


Which statement describes the cross-sections of each figure created by the shaded planes?

- A. The cross-sections of both figures are rectangles.
- B. The cross-sections of both figures are parallelograms that are not rectangles.
- C. The cross-section of Figure 1 is a triangle, and the cross-section of Figure 2 is a rectangle.
- D. The cross-section of Figure 1 is a trapezoid, and the cross-section of Figure 2 is a rectangle.

55. Andrea made a spinner with a letter marked on each section. She said the probability of the arrow landing on G is $\frac{1}{4}$.

Which spinner could be the one that Andrea made?



$G \rightarrow \frac{3}{12} \text{ or } \frac{1}{4}$

56. Tara had $1\frac{5}{8}$ pounds of dried nuts. She ate $\frac{1}{4}$ pound of dried nuts each day for 6 days.

How many pounds of dried nuts did Tara have left after 6 days?

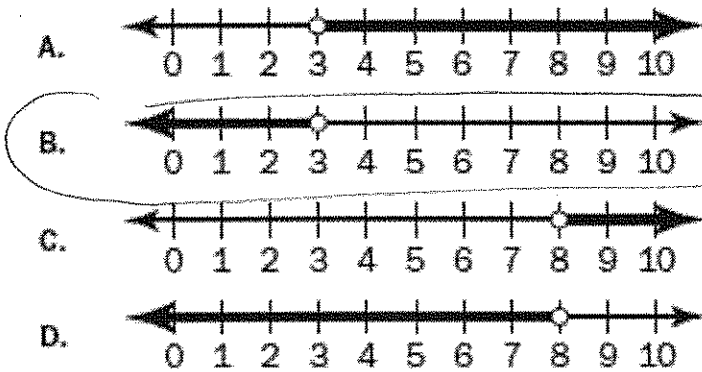
- A. $\frac{1}{8}$
- B. $\frac{7}{8}$
- C. $1\frac{1}{2}$
- D. $1\frac{3}{8}$

$$1\frac{5}{8} - 6(\frac{1}{4}) \text{ or } 1\frac{5}{8} - 1\frac{2}{4} \text{ or}$$

$$1\frac{5}{8} - 1\frac{4}{8} \rightarrow \boxed{\frac{1}{8}}$$

57. Look at the inequality. $2x + 5 < 11$

Which number line shows the solution to this inequality?



$$2x + 5 < 11$$

$$\quad \quad -5 \quad -5$$

$$\frac{2x}{2} < \frac{6}{2}$$

$$\boxed{x < 3}$$

58. 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. Julie 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?

59. Which expressions are equivalent to $3\frac{1}{4} - (-\frac{5}{8})$? Select all that apply.

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

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

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

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

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

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

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

$$2 - \frac{3}{2}x + 3 =$$

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

61. The number 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	27	72	52

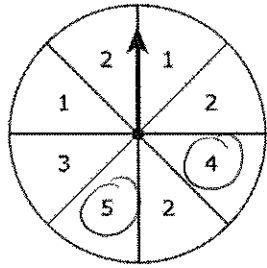
Only one of the machines produces parts at a constant rate. Which equation represents y , the number of parts produced in x minutes, for the one machine that produces parts at a constant rate?

- A. $y = 3x$
- B. $y = 6x$
- (C) $y = 8x$
- D. $y = 9x$

Machine R produces parts at a constant rate.

Minutes (x)	# of Parts (y)
1	8
3	24
9	72

62. The spinner shown is divided into 8 equal sections.

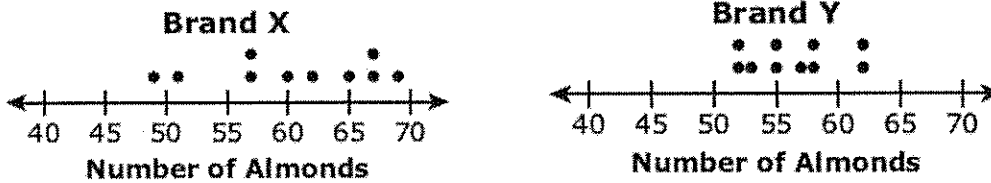


The arrow on this spinner is spun once.

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. $\frac{1}{2}$
- $\frac{2}{8}$ or $\frac{1}{4}$

63. 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.



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

- Ⓐ The number of almonds in jars from Brand X tends to be greater and more consistent than those from Brand Y.
- Ⓑ The number of almonds in jars from Brand X tends to be greater and less consistent than those from Brand Y.
- Ⓒ The number of almonds in jars from Brand X tends to be fewer and more consistent than those from Brand Y.
- Ⓓ The number of almonds in jars from Brand X tends to be fewer and less consistent than those from Brand Y.