

# Math League Practice #5

## Fifth Grade

Name: \_\_\_\_\_

Date: \_\_\_\_\_

- 1 Stylists at a hair salon charge \$26 for each haircut. If they gave 63 haircuts, how much money did they collect, not including tips?

- A \$89
- B \$504
- C \$1,538
- D \$1,638

- 2 Marcy bought 6 apples priced at \$0.35 each. She used a coupon worth \$0.50 off the total cost. Which number sentence can be used to find how much money Marcy needed in order to buy the apples?

- A  $(6 \times 0.35) - 0.50 = 1.60$
- B  $(6 + 0.35) + 0.50 = 6.85$
- C  $(6 - 0.35) + 0.50 = 6.15$
- D  $(6 \times 0.50) - 0.35 = 2.65$

- 3 Look for the pattern in the sequence of numbers below.

25, 32, 28, 35, 31, 38

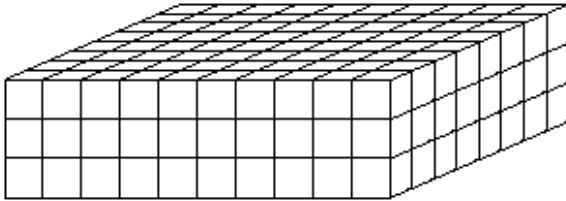
Which rule describes this pattern best?

- A Add 25, subtract 4
- B Add 13, subtract 7
- C Add 7, subtract 4
- D Add 4, subtract 7

- 4 Which group shows the prime factorization of the number 104?

- A  $2 \times 2 \times 2 \times 13$
- B  $2 \times 4 \times 13$
- C  $4 \times 26$
- D  $2 \times 2 \times 26$

5 A rectangular prism is shown below.



What is the volume of this rectangular prism?

- A 240 cubic units
- B 110 cubic units**
- C 83 cubic units
- D 54 cubic units

6 Amy has 6 video games, as shown below. She plans to play 2 of these games today, and the order in which she plays them is not important.



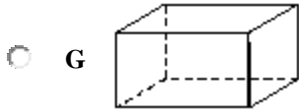
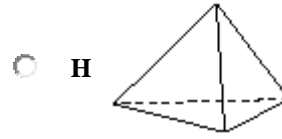
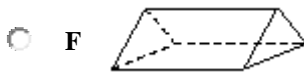
How many different combinations of 2 video games are possible?

- F 15**
- G 12
- H 5
- J 4

7 How many millimeters are equivalent to 400 centimeters?

- F 0.4 mm**
- G 4 mm
- H 40 mm
- J Not Here

8 Which of these figures has 2 more vertices than faces?



9 The numbers below form a pattern.

23, 27, 33, 37, 43, 47, ...

Which of the following numbers will fit the pattern when it is extended?

- F** 51
- G** 78
- H** 104
- J** 123

10 Carmen recorded the colors of the first 24 cars that drove by her house Saturday morning. The table shows the data she collected.

**Car Colors**

Color	White	Black	Red	Blue	Green	Other
Number of Cars	4	6	2	5	4	3

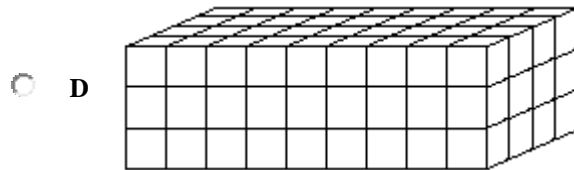
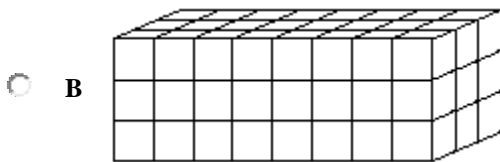
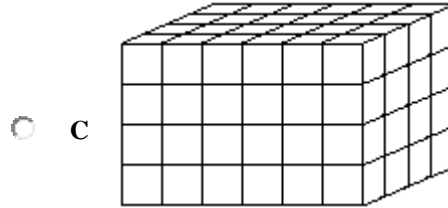
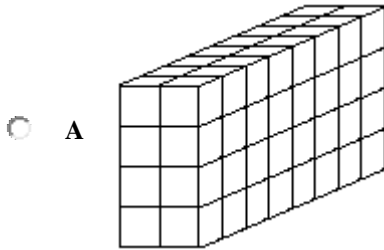
Which fraction represents the number of black cars that she counted?

- A**  $\frac{1}{3}$
- B**  $\frac{1}{4}$
- C**  $\frac{1}{5}$
- D**  $\frac{1}{6}$

# Math League Practice #6

## Fifth Grade

1 Which of these rectangular prisms has a volume of 96 cubic units?



2 On a class field trip, there was 1 adult for every 8 students. If a total of 54 students and adults went on the trip, how many were students?

- A 46
- B 47
- C 48
- D 62

3 Trent is 5 feet tall. Her sister Elise is 30 inches tall. What fractional part of Trent's height is Elise's height?

- A  $\frac{1}{6}$
- B  $\frac{1}{3}$
- C  $\frac{1}{2}$
- D  $\frac{2}{3}$

- 4 The table shows the amount of water that Nicholas drinks over a certain number of days.

**Water that Nicholas Drinks**

Number of Days	Ounces of Water (total)
3	144
4	192
6	288
7	336

If this pattern continues, how many ounces of water will he drink over 9 days?

- F 240 oz
  - G 345 oz
  - H 384 oz
  - J 432 oz
- 5 A trapezoid is shown below.



Which statement about the trapezoid is true?

- A The trapezoid has 3 acute angles.
  - B The trapezoid has 2 sides that are parallel lines.
  - C The trapezoid has 2 right angles.
  - D The trapezoid has 3 obtuse angles.
- 6 Alaska, the largest state in the United States, has an area of 656,424 square miles. Rhode Island, the smallest state, has an area of 1,545 square miles. What is the difference between the areas of these two states?
- F 501,924 sq mi
  - G 654,879 sq mi
  - H 655,879 sq mi
  - J 657,969 sq mi

- 7 Some friends went to a movie theater by different routes. It took Malcolm twice as long as Julie to get to the theater. It took Alex 5 minutes longer than it took Julie. Which table shows a reasonable set of travel times for the 3 friends' routes?

F

Person	Time
Malcolm	18
Julie	9
Alex	13

G

Person	Time
Malcolm	16
Julie	10
Alex	15

H

Person	Time
Malcolm	18
Julie	9
Alex	14

J

Person	Time
Malcolm	17
Julie	10
Alex	14

- 8 Dora's family bought a bag of oranges. There are 6 people in Dora's family. If they ate  $\frac{3}{8}$  of the oranges, what fraction of the oranges remained?

A  $\frac{9}{8}$

B  $\frac{5}{8}$

C  $\frac{3}{14}$

D  $\frac{3}{48}$

- 9 Cindy and 2 friends ordered a large pizza for \$9.00, 3 large drinks for \$0.99 each, and a salad for \$1.50. If they split these costs evenly, which equation can be used to find  $c$ , the amount in dollars and cents each person should pay, not including tax?

- A**  $c = 9.00 + 0.99 + 1.50 \div 3$
- B**  $c = 9.00 + 3 \times 0.99 + (1.50 \div 3)$
- C**  $c = (9.00 + 0.99 + 1.50) \div 2$
- D**  $c = (9.00 + 3 \times 0.99 + 1.50) \div 3$

10 The ratio of red rosebushes to yellow rosebushes in the school garden is about 3 to 4. If there were 36 yellow rosebushes, about how many red rosebushes would there be?

- F** 36
- G** 32
- H** 27
- J** 12

11 Corinne's group was responsible for painting windows on the set of a school play. The group painted 18 windows in 90 minutes. If they continued painting at this rate, how many windows would they paint in 3 hours?

- A** 24
- B** 36
- C** 54
- D** 72

12 Stephanie bought a basketball on sale for \$15, which was  $\frac{1}{5}$  off the original price. What decimal represents the discount she received?

- F** 0.05
- G** 0.15
- H** 0.20
- J** 0.50

13 Scott has 5 green marbles, 8 red marbles, 2 purple marbles, and 6 blue marbles in a container. If he draws a

marble at random from the container, what is the probability that he will NOT draw a blue marble?

- A  $\frac{1}{4}$
- B  $\frac{2}{7}$
- C  $\frac{5}{7}$
- D  $\frac{3}{4}$