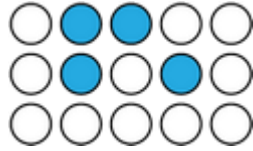


Name: _____

Section: _____

Ratios & Rates Practice

1) A picture is shown.



- a. What is the ratio of the unshaded circles to the total number of circles in the picture?
 - b. What is the ratio of the shaded circles to the total number of circles in the picture?
 - c. What is the ratio of the shaded circles to the unshaded circles in the picture?
 - d. What is the ratio of the unshaded circles to the shaded circles in the picture?
- 2) Jamar has 18 nickels and 14 dimes in his piggy bank. Select **ALL** the statements that are true about the relationship between the number of nickels and dimes in Jamar's piggy bank.
- a. For every 9 nickels in Jamar's piggy bank, there are 7 dimes.
 - b. For every 18 nickels in Jamar's piggy bank, there are 32 dimes.
 - c. The ratio of dimes to nickels is 14 to 32.
 - d. The ratio of nickels to dimes is 9:7.
- 3) Ms. Carnes surveyed her math class to determine if the students would like to eat cheese or pepperoni pizza. She noticed that for every 5 students that preferred cheese pizza, there were 3 students that preferred pepperoni pizza. Select **ALL** of the following statements that **COULD** accurately describe the results of Ms. Carnes's survey.
- a. 80 preferred cheese pizza, and 50 preferred pepperoni pizza.
 - b. 50 preferred cheese pizza, and 30 preferred pepperoni pizza.
 - c. 12 preferred cheese pizza, and 20 preferred pepperoni pizza.
 - d. There were 50 total students, and 30 of them preferred cheese pizza.
 - e. There were 40 total students, and 15 of them preferred cheese pizza.

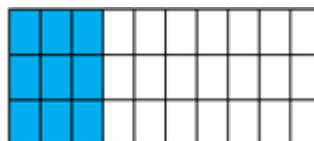
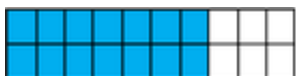
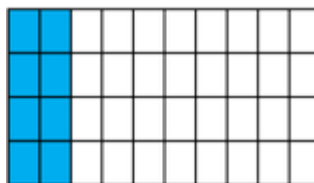
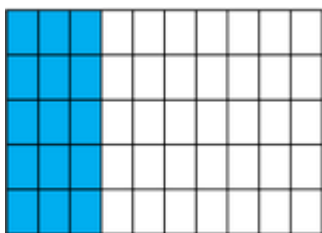
- 4) Alexandra's homeroom took a survey to determine their favorite ice cream flavors. 12 students chose chocolate; 8 students chose vanilla; 6 students chose strawberry; and 2 students chose coffee. Select **ALL** of the following that correctly describe the ratio of number of students who chose vanilla to the total number of students surveyed.
- 12:8
 - 8:12
 - $\frac{2}{7}$
 - $\frac{7}{2}$
 - For every 2 students that chose vanilla, there were 7 total students.
 - For every 4 students that chose vanilla, there were 14 total students.
- 5) The following tables show the points scored by basketball players, by position, at the last game between Kennedy Middle School and King Middle School. Based on the tables shown, select **ALL** the statements that are true.

Kennedy MS	
Position	Points Scored
Center	15
Forward	18
Guard	32

King MS	
Position	Points Scored
Center	20
Forward	24
Guard	16

- The Kennedy MS guards scored 2 points for every point that the King MS guard scored.
- The ratio of the Kennedy MS centers' points to the Kennedy MS forwards' points is 6:5.
- The ratio of the King MS centers' points to the King MS guards' points is 5:4.
- For every 3 points that the King MS forwards scored, the Kennedy MS forwards scored 2.
- The ratio of total points scored by Kennedy MS to the points scored by the Kennedy MS centers is 13:3.

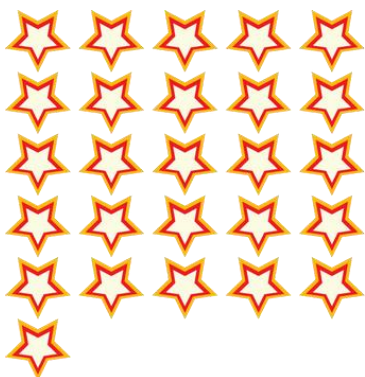
- 6) The ratio of unshaded to shaded squares is 7:3. Which of the following grids shows a ratio of unshaded to shaded sections that is 7:3?



- 7) Vowels are the letters A, E, I, O, U, and Y. Consonants are all the letters that are not vowels. Select **ALL** the words listed that have a 1:1 ratio of vowels to consonants.

- | | | |
|-------------|------------|---------------|
| a. Addition | e. Rate | i. Florida |
| b. Math | f. Special | j. Arkansas |
| c. Number | g. Forever | k. Delaware |
| d. Feeder | h. Seed | l. California |

- 8) Veronica made the paper star shown as decorations for her little brother's birthday party. She took 52 minutes to make all the stars. If Veronica took the same time to make each star, how many minutes did she take to make 1 star?



- 9) On average, a bicycle tire completes 8 rotations every 3 seconds. At this rate, about how many seconds will it take for the bicycle tire to complete 24 rotations?

10) Jesse's car uses an average of 2 gallons of gas to drive 24 miles. At this rate, how many miles can Jesse travel on 5 gallons of gas?

11) At what store can 30 donuts be purchased for the least amount of money?

Store	Package Size	Cost
Store A	1 donut per pack	\$0.79
Store B	3 donuts per pack	\$2.28
Store C	10 donuts per pack	\$8.20
Store D	30 donuts per pack	\$24.00

12) A hotel manager purchased the uniforms shown. He paid a total of \$207. How much did each uniform cost?

