Course 1 Benchmark Test – First Quarter

1. The table below shows the number of pennies, nickels, dimes, and quarters that Heather has in her purse. What is the ratio of dimes to nickels expressed as a fraction in simplest form?

Heather's Coins		
Dimes	9	
Nickels	6	
Pennies	8	
Quarters	4	

*A. $\frac{3}{2}$

C. $\frac{3}{5}$

B. $\frac{2}{3}$

- **D.** $\frac{2}{5}$
- **2.** A cookie recipe calls for a ratio of 4 cups of flour to 3 cups of sugar. For each cup of flour that is used, how many cups of sugar are needed?
 - **F.** $\frac{4}{3}$ cups of sugar
- ***G.** $\frac{3}{4}$ cups of sugar
- **H.** $\frac{2}{3}$ cup of sugar
- I. $\frac{3}{7}$ cup of sugar
- **3.** Which ratio is *not* equivalent to 5 : 8?
 - ***A.** 10 out of 18
 - **B.** 15 to 24
 - C. $\frac{20}{32}$
 - **D.** 10 : 16

4. SHORT ANSWER Mrs. Wilkinson can buy a 20-ounce box of cereal for \$3.60 or a 28-ounce box of cereal for \$4.20. Which is the better buy? Explain your reasoning.

28-oz box; The unit rate for the 28-oz box is \$0.15 per ounce. The unit rate for the 20-oz box is \$0.18 per ounce. 0.15 < 0.20

5. The ratio table shows how much Raymond's brother earns for working different numbers of hours. How many hours would he need to work in order to earn \$176?

Hours	5	8	15	
Earnings	\$40	\$64	\$120	\$176

- **F.** 18 hours
- **G.** 20 hours
- ***H.** 22 hours
 - I. 24 hours

- **6.** There are 30 students in Mr. Holland's music class. If 30% of the students play in the school band, how many students in the class play in the school band?
 - *A. 9 students
 - **B.** 12 students
 - C. 15 students
 - **D.** 100 students

Course 1 Benchmark Test – First Quarter (continued)

7. SHORT ANSWER Jasmine answered 19 out of 25 questions correctly on a quiz. About what percent of her answers were correct? Explain.

Sample answer: about 80%. $\frac{19}{25}$ is approximately $\frac{20}{25}$, which is 80%.

8. Which of the following shows the rational numbers in order from least to greatest?

F. 25%, 0.22,
$$\frac{1}{5}$$

*G.
$$\frac{1}{5}$$
, 0.22, 25%

H.
$$0.22, \frac{1}{5}, 25\%$$

I. 0.22, 25%,
$$\frac{1}{5}$$

9. The model below represents 66%. What decimal is equivalent to this percent?



- **A.** 0.066
- ***B.** 0.66
 - **C.** 6.6
- **D.** 66

10. How is the decimal 0.55 written as a fraction in simplest form?

F.
$$\frac{55}{100}$$

*G.
$$\frac{11}{20}$$

H.
$$\frac{11}{50}$$

I.
$$\frac{11}{55}$$

11. Caleb's receipt for lunch is shown below. If Caleb pays with a \$10 bill, how much change will he receive?

Donna's Deli
Chicken Sandwich\$3.79
Soup\$1.45 Drink\$1.29
Drink\$1.29
Tax\$0.39

- **A.** \$6.92
- **B.** \$5.74
- **C.** \$3.18
- ***D.** \$3.08
- **12.** Colleen rode her bicycle 9.5 miles in 0.8 hour. What was her average speed in miles per hour?
 - ***F.** 11.875 miles per hour
 - G. 10.3 miles per hour
 - H. 8.7 miles per hour
 - I. 7.6 miles per hour

Course 1 Benchmark Test – First Quarter (continued)

- **13.** There are 25 servings in a 30.2-ounce jar of peanut butter. How many ounces of peanut butter are there in 1 serving?
 - ***A.** 1.208 ounces
 - **B.** 1.15 ounces
 - C. 0.828 ounce
 - **D.** 0.64 ounce
- **14. SHORT ANSWER** Angela earns \$6.25 per hour babysitting. Estimate how much she will earn if she babysits for 9 hours this weekend. Explain.

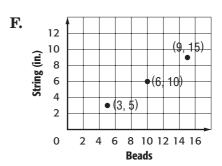
Sample answer: about \$54. Round \$6.25 to \$6 and multiply by 9.

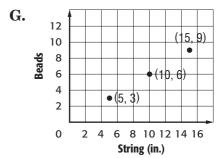
- **15.** Which of the following is *not* a factor of 84?
 - **F.** 2
 - **G.** 3
 - **H.** 7
 - ***I.** 8
- **16.** Which of the following does *not* represent the shaded portion of the figure below?

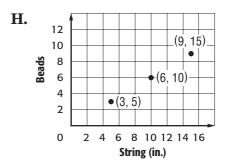


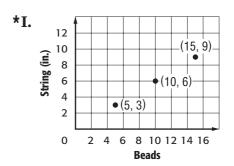
- *A. 25%
 - **B.** $\frac{3}{4}$
 - **C.** 75%
 - **D.** 0.75

17. Roberta uses 5 beads for every 3 inches of string while making necklaces. Which graph best represents the ratio of necklace string to beads used?









Course 1 Benchmark Test – First Quarter (continued)

- **18.** Regina purchased 1.75 pounds of turkey breast from her local deli for \$5.99 per pound. To the nearest cent, how much did she spend in all?
 - **A.** \$3.42
 - **B.** \$7.74
 - ***C.** \$10.48
 - **D.** \$11.98
- 19. SHORT ANSWER Katrina uses 4.125 yards of fabric for each curtain panel she makes. How many yards will she need if she makes 14 panels? 57.75 yards
- **20.** The table below shows the results of a survey on students' favorite school lunches. What fraction of the students surveyed said that grilled cheese is their favorite school lunch?

What Is Your Favorite School Lunch?		
Lunch	Percent	
Pizza	35%	
Grilled Cheese	30%	
Spaghetti	20%	
Chicken	10%	
Soup	5%	

- **F.** $\frac{3}{100}$
- **G.** $\frac{1}{5}$
- **H.** $\frac{1}{4}$
- *I. $\frac{3}{10}$

- 21. Tommy's batting average this season is 0.275. This means that he had a hit in 27.5% of his at-bats. If Tommy had 11 hits so far this season, how many at-bats has he had?
 - ***A.** 40 at-bats
 - B. 35 at-bats
 - C. 26 at-bats
 - **D.** 3 at-bats
- **22.** In a machine, a large gear completes a revolution every minute while a small gear completes a revolution every 24 seconds. If the gears are currently aligned, how much time will pass before they are aligned again?
 - F. 12 seconds
 - G. 24 seconds
 - H. 1 minute
 - *I. 2 minutes
- **23.** Which of the following is the best estimate for the problem shown below?

$$151 \div 29$$

- **A.** about 4
- *B, about 5
- C. about 6
- **D.** about 7

Course 1 Benchmark Test – First Quarter (continued)

- **24. SHORT ANSWER** One acre is equivalent to 43,560 square feet. If an acre is also equivalent to 4,840 square yards, how many square feet are equal to one square yard?
 - 9 square feet

25. Which model represents 140%?

