

Name _____ Date _____

Assessment: Proportional Reasoning

1. Which relationship has a unit rate of 60 miles per hour?
 - A. 300 miles in 6 hours
 - B. 300 miles in 5 hours
 - C. 240 miles in 6 hours
 - D. 240 miles in 5 hours
2. Mrs. Ross needs to buy dish soap. There are four different sized containers.

Dish Soap Prices	
Brand	Price
Lots of Subs	\$0.98 for 8 ounces
Bright Wash	\$1.29 for 12 ounces
Spotless Soap	\$3.14 for 30 ounces
Lemon Bright	\$3.45 for 32 ounces

Which brand costs the least per ounce?

- A. Lots of Suds
 - B. Bright Wash
 - C. Spotless Soap
 - D. Lemon Bright
3. Debra can run $20\frac{1}{2}$ miles in $2\frac{1}{2}$ hours. How many miles per hour can she run?
 - A. $46\frac{1}{8}$ miles per hour
 - B. $22\frac{3}{4}$ miles per hour
 - C. $18\frac{1}{4}$ miles per hour
 - D. $9\frac{1}{9}$ miles per hour

4. In which proportion does x have a value of 4?

A. $\frac{x}{21} = \frac{12}{7}$

B. $\frac{12}{21} = \frac{x}{7}$

C. $\frac{12}{21} = \frac{x}{7}$

D. $\frac{1}{x} = \frac{5}{200}$

5. A recipe for making 3 dozen muffins requires 1.5 cups of flour. At this rate, how many cups of flour are required to make 5 dozen muffins?

A. 2 cups

B. 2.5 cups

C. 3 cups

D. 3.5 cups

6. Identify the constant of proportionality for the following table:

x	y
3	13.5
7	31.5
11	49.5

A. 3

B. 4.5

C. 220.5

D. $\frac{2}{9}$

7. The table shows the total distance traveled by a car driving at a constant rate of speed. How far will the car have traveled after 10 hours?

Time (h)	Distance (mi)
2	130
3.5	227.5
4	260
7	455

- A. 520 miles
- B. 585 miles
- C. 650 miles
- D. 715 miles

8. Martinez is comparing the price of oranges from several different markets. Which market's pricing guide is in proportion?

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Number of Oranges	5	10	15	20
Total Cost (\$)	3.50	6.00	8.50	11.00

Ⓒ

Number of Oranges	5	10	15	20
Total Cost (\$)	3.00	5.00	7.00	9.00

Ⓑ

Number of Oranges	5	10	15	20
Total Cost (\$)	3.50	6.50	9.50	12.50

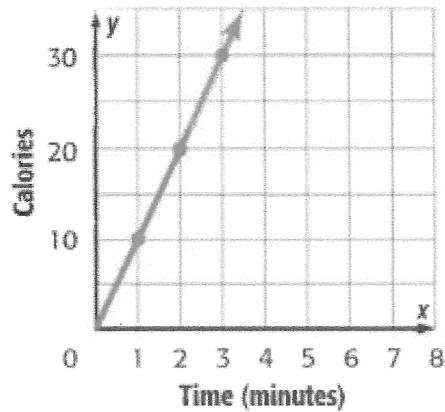
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Number of Oranges	5	10	15	20
Total Cost (\$)	3.00	6.00	9.00	12.00

9. Mike walks 10 meters in 3 seconds. Which equation represents the distance d that Mike walks in t seconds?

- A. $d = 3t$
- B. $d = 10t$
- C. $d = 0.3t$
- D. $d = \frac{10}{3}t$

10. The Calories burned for exercising various number of minutes are shown in the graph. Which statement about the graph is not true?



- A. The number of Calories burned is proportional to the number of minutes spent exercising.
 - B. The number of Calories burned is not proportional to the number of minutes spent exercising.
 - C. If the line were extended, it would pass through the origin.
 - D. The line is straight.
11. Identify the constant of proportionality for the graph below.

- A. $\frac{3}{2}$
- B. $\frac{2}{3}$
- C. $\frac{7}{10}$
- D. $\frac{10}{7}$

