

Name _____

Date _____

Mr. Tallman

Review for Quiz 4 – Ratios and Proportions (Lessons 21 – 27)

1) Lauren jogs at a rate of 2 miles every $\frac{2}{5}$ of an hour. What is her unit rate in miles per hour?

- A) 0.4 mi/hr B) 5 mi/hr
C) 2 mi/hr D) 10 mi/hr

2) The tables below show the number of pages that several students read over a four day period. Which table shows a proportional relationship?

A

Number of Days x	1	2	3	4
Total Pages y	16	24	32	40

B

Number of Days x	1	2	3	4
Total Pages y	12	24	36	48

C

Number of Days x	1	2	3	4
Total Pages y	15	20	25	30

D

Number of Days x	1	2	3	4
Total Pages y	8	16	27	36

3) An elevator moves at a constant speed of 20 feet per second. If the elevator travels for 3.5 seconds, how many feet has the elevator traveled?

- A) 3.5 feet B) 23.5 feet C) 70 feet D) 5.7 feet

4) Two pounds of dried cranberries cost \$5.04, 3 pounds of dried cranberries cost \$7.56, and 7 pounds of dried cranberries cost \$17.64. What is the unit price?

5) Write an equation ($y = kx$) to represent the proportional relationship described in question #4. _____

6) In a brownie recipe, for every $\frac{1}{6}$ of a cup of flour needed, $\frac{3}{5}$ of a cup of sugar is needed. How many cups of flour is needed for every cup of sugar? (HINT: Find the unit rate)

7) A satellite travels $29\frac{1}{2}$ miles every $4\frac{1}{3}$ seconds. What is the unit rate of speed?

- A) $6\frac{21}{26}$ miles per second B) $29\frac{1}{2}$ miles per second
C) $33\frac{5}{6}$ miles per second D) $127\frac{5}{6}$ miles per second.

8) The table below shows the cost of downloading apps to a smartphone.

Number of Downloads x	2	4	5	6	10
Total Cost (\$) y	6	12	15	18	30

A) Is this a proportional relationship? Show all work.

B) If so, what is the constant of proportionality? _____

C) What does the constant of proportionality represent in the context of the situation?

D) Write an equation to represent this situation. _____

9) Michael reads 12 pages of a book in 18 minutes, 8 pages in 12 minutes, and 20 pages in 30 minutes.

A) Is this a proportional relationship? Show all work.

B) If so, what is the constant of proportionality? _____

C) What does the constant of proportionality represent in the context of the situation?

D) Write an equation to represent this situation. _____

10) The table below shows the relationship between the number of cars sold and the money earned for a car salesperson. Is this a proportional relationship? Show all work and explain.

Number of Cars Sold x	Money Earned y
1	250
2	600
3	950
4	1076
5	1555

11) Brand A pasta sauce weighs 26 ounces and costs \$4.99. Brand B pasta sauce weighs 32 ounces and costs \$5.79.

A) Which brand of pasta sauce is the better buy? Show all work.

B) Explain your answer from part A.
