

702 Unit 5 Assessment

Name: _____

Date: _____

Period: _____

Multiple Choice Directions: Read each problem carefully. Show all of your work when solving problems. Select the best answer and bubble in the appropriate answer in the box for the bubble sheet.

7.RP.1 **280**

1. If Mark drove ~~280~~ miles in 4 hours, how many miles can he drive in 1 hour?

19

2. A person can read ~~19~~ pages of a book in $\frac{1}{3}$ of an hour. What is the person's reading rate in pages per hour?

3. Sonya purchased $\frac{3}{4}$ pound of pecans for \$5.40. What is the cost of 1 pound of pecans?

4. The costs of different sizes of bottled sport drink are shown. Which bottle costs the least per ounce?

Size	8 oz	16 oz	24 oz	32 oz
Price	\$0.89	\$1.09	\$1.89	\$2.49

5. If it takes 15 gallons of gas to drive 330 miles, how many miles can be driven using **18** gallons of gas?

6. On October 15, 2003, Yang Liwei orbited the Earth 14 times in 21-hours for the country of China. How many hours did it take Liwei to orbit the Earth one time?

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7.RP.2

7. The table shows the relationship between the number of dog years for small breed dogs and the number of human years. Is this relationship proportional?

- A. Yes, because both lists increase in value.
- B. No, because 1:15 is not the same ratio as 2:24
- C. Yes, because the graph of this relationship would go through the origin.
- D. No, because the human ages are multiples of 4.

Human Years	Dog Years
1	15
2	24
3	28
4	32
5	36
6	40
7	44
8	48

8. Which of the following is considered a true proportion?

- A) $\frac{3}{2} = \frac{2}{3}$
- B) $\frac{4}{6} = \frac{8}{24}$
- C) $\frac{7}{14} = \frac{21}{28}$
- D) $\frac{9}{20} = \frac{45}{100}$

9. The table shows the amount of fat grams in various servings of tomato soup based on a popular recipe. If the rate of fat grams per serving remains the same, how many grams of fat would complete the table for 12 servings of soup?

Fat per Serving	
Servings	Fat (grams)
3	8.7
5	14.5
8	23.2
12	

10. Which situation BEST represents a proportional relationship?

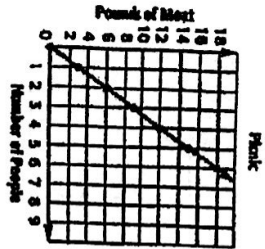
- A. Lamont packed 36 glasses in 12 cases and 99 glasses in 33 cases.
- B. Jeff ran 4 miles in 24 minutes and 6 miles in 30 minutes.
- C. Sandra sold 2 bracelets for \$4 and 3 bracelets for \$8
- D. Fernanda placed 16 pencils in 8 boxes and 20 pencils in 5 boxes.

For numbers 11 and 12, find the constant rate of change for the table or graph.

11.

Hours	2	4	6	8
Miles	70	140	210	280

Find the constant rate of change for this graph.



12.

7.RP.3

13. Brennan made lemonade for the county fair. He has 12 containers of the same size to fill. It takes 16 gallons of lemonade to fill the first 3. How many gallons of lemonade will the remaining 9 containers hold?

- A. 19 gal
- B. 32 gal
- C. 48 gal
- D. 60 gal

14. A factory produced 4000 light bulbs in one day. A sample of 100 bulbs was randomly selected and tested. The tests revealed that 7 of the 100 light bulbs were defective. At this rate, how many light bulbs would be defective out of the 4000 produced?

15. Tim answers 7 out of 8 questions correctly. At this rate, how many questions will he answer correctly out of 96?

16. A dolphin can swim up to 40 miles per hour. What is this speed in miles per minute?

Updated 10/2016

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 Error Response Directions: Read each problem carefully. You must show all of your work when solving problems. Remember to always simplify and label your answers. Write your final answer on the line provided.

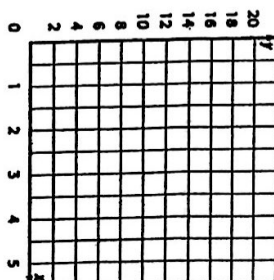
7.RP.2

17. A plant grows 2.5 inches every 4 days. Is the height of the plant proportional to the number of days of growth? Complete the table and explain your reasoning. (4 points)

Time (days)	4	8	12	16
Height (inches)				

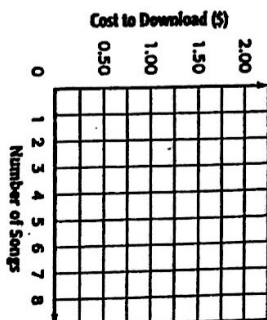
18. Determine whether the relationship between the two quantities shown in the table is proportional by graphing on the coordinate plane. Label the axes. Then explain your reasoning. (4 points)

Number of DVDs	Cost (\$)
1	7
2	9
3	11



19. The table shows the cost to download songs from a new website. Graph the data. Then find the rate of change for the line and explain what it represents. (3 points)

Number of Songs	3	5	7
Cost (\$)	.75	1.25	1.75



7.RP.3
 20. A fox can run at a speed of 42 miles per hour. How many feet per second is this? (Hint: 5,280 ft = 1 mile and 3,600 seconds = 1 hour). (4 points)

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