

7th Grade Unit 3 Study Guide

1. Which ratio is NOT proportional to $\frac{3}{9}$?

CC.7.RP.2a

A. $\frac{1}{3}$

B. $\frac{6}{12}$

C. $\frac{10}{30}$

D. $\frac{21}{63}$

2. Al worked $2\frac{1}{4}$ hours and made \$54. How much did he earn per hour?

CC.7.RP.1

3. Who makes the least money per hour?

CC.7.RP.1

Person	Hours	Money
Ann	20	\$200.00
Bob	10	\$105.00
Cal	16	\$184.00

4. Who makes the most per hour?

5. Tony's bill at the restaurant was \$9.52. If he wants to leave a 20% tip, how much is that?

CC.7.RP.3

6. Europe uses Euros instead of dollars. How many euros can we get for 40 U.S. dollars? If:

1 U.S. dollar = .74 euros.

CC.7.RP.2

7. I like to make cookies using a recipe. I want to make a smaller batch, so I will use half of every measurement listed in the recipe. If the recipe requires $\frac{1}{3}$ cup of water, how much water should he use?

CC.7.RP.1

8. A tablet is on sale for \$268.00. How much will it cost, including the 6% sales tax?

CC.7.RP.3

9. Which equation represents the relationship between the number of miles traveled and how much it cost?

A. $y = x$

B. $y = 2x$

C. $y = 3x$

D. $y = 4x$

CC.7.RP.2c

miles (x)	cost (y)
1	\$4
2	\$8
3	\$12
4	\$16

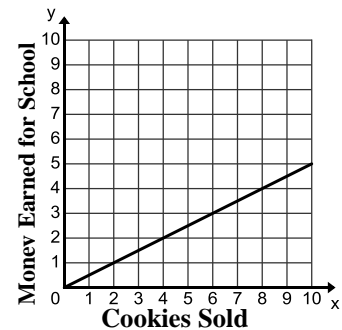
10. Which of the following scenarios is represented by the graph?

A. For every cookie sold, the school earns \$0.25.

B. For every cookie sold, the school earns \$0.50.

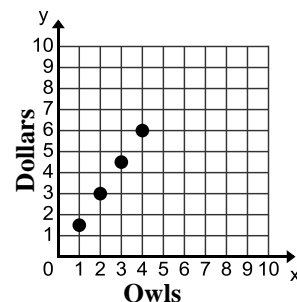
C. For every cookie sold, the school earns \$1.00.

D. For every cookie sold, the school earns \$2.00.



CC.7.RP.2

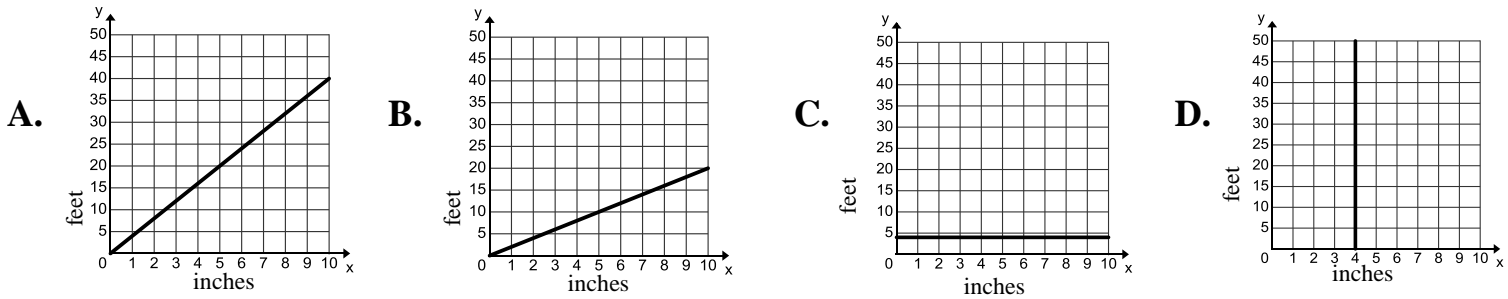
11. The graph represents the relationship between x (the number of owls fed) and y (the number of dollars spent). What is the amount of money that will be spent to feed 10 owls?



CC.7.RP.2

12. A model plane is at the scale of 1 inch = 4 feet. Which graph represents this?

CC.7.RP.2



13. The results of the first 100 students who voted are represented in the table. There are still 50 more students left to vote. Based on the early results, how many **MORE** votes do you expect Dan to get out of the 50 late voters?

President	# Votes
Bob	25
Carol	65
Dan	10

C.7.RP.3

14. Bo bought a few items for \$93.84, not including tax. If the tax rate was 7%, what was the total cost of these tools, including tax?

CC.7.RP.3

15. It is 75 miles from my house to the Georgia Aquarium. On my map it measures $1\frac{3}{4}$ inches. What is the scale of the map?

CC.7.G.1

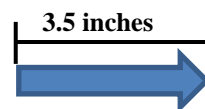
16. The scale on a road map is **1 inch = 40 miles**.

What is the actual length of a road that measures $2\frac{1}{4}$ inches on the map?

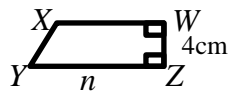
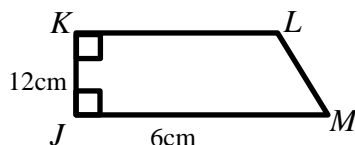
CC.7.G.1

17. Based on the drawing, what was the actual length, in feet, of the arrow?

1 in = 3 feet



CC.7.G.1



18. In the diagram above, figure $JKLM$ is similar to figure $WXYZ$. Which of the following proportions can be used to find the value of n ?

CC.7.G.1

A. $\frac{4}{n} = \frac{6}{12}$

B. $\frac{n}{4} = \frac{12}{6}$

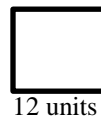
C. $\frac{6}{n} = \frac{2}{4}$

D. $\frac{4}{n} = \frac{12}{6}$

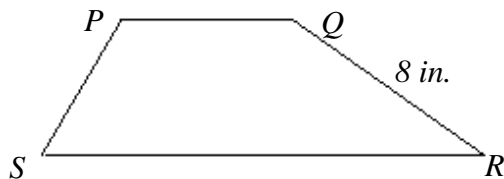
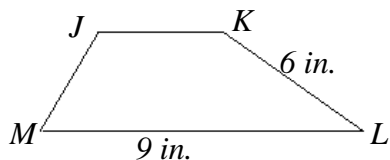
19. Tim made a scale drawing of a rectangular parking lot. The actual length of the lot is 36 feet. The scale used to make the drawing was $\frac{1}{4}$ in. = 2 ft. What is the length of the drawing of the room?

CC.7.G.1

-
20. What is the ratio of the perimeters of the 2 squares?



CC.7.G.1



-
21. If JKLM is similar to PQRS, what is the length of RS ?

CC.7.G.1

-
22. If the regular price of a pair of shoes is \$75 and they are on sale for 40% off, what is the sale price? Be sure to give the sale price, not the amount off.

-
23. Kroger buys sodas for 80 cents each. If they mark them up by 25% before they sell them, what should the selling price be?

24.