

Flex	Math	7

Worksheet 2: Identify Unit Rates and Represent Them **Using Equations**

Student Name	Date
School of Enrollment	

Worksheet instructions:

- 1. Solve each problem. Remember to show your work!
- 2. Submit the completed worksheet to your Flex course.

Part A: Short Answer: Read each scenario and show your work to solve the problem.

- 1. A store is having a sale to celebrate President's Day. Every item in the store is advertised as one fifth off the original price. If an item is marked with a sale price of \$140, what was its original price? Show your work.
- 2. At a conference, there are 42 middle school math teachers and 14 middle school science teachers. If the high school sends half as many math teachers, how many science teachers should they send if they want to keep the ratios proportional?
- 3. The following table shows a proportional relationship. Find the missing value for n.

Cups	Ounces
2	16
3	24
4	32
5	40
25	n

Part B: Multiple Choice: Circle the correct answer to each question. Show any work that is need to find your answer.

- 4. Which of the following has the same unit rate as 300 words in 4 minutes?
 - A. 120 words in 1 minutes
 - B. 450 words in 6 minutes
 - C. 200 words in 2 minutes
 - D. 600 words in 5 minutes
- 5. Identify the equation that represents a proportional relationship.

A.
$$y = -3x + 2$$

B.
$$y = -2x + 4$$

C.
$$y = 4x$$

D.
$$y = x + 7$$

Using Equations

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- 6. Eggs are packaged by the dozen. If a dozen eggs costs \$1.56, what is the unit price per egg?
 - A. \$13
 - B. \$1.30
 - C. \$0.13
 - D. \$0.01
- 7. Given the following table that represents a proportional relationship, which of the following is the correct equation?

- A. y = -3x B. y = 3x 3 C. y = 3x D. y = 3x + 3

X	У
-1	-3
0	0
1	3
2	6
3	9

- 8. The table below shows a proportional relationship. What is the constant of proportionality?
- A. 3/2

- B. 1 C. 4/5 D. 2/3

X	У
12	8
15	10
18	12
21	14

Part C: Proportional Equations: Are the following equations proportional? Answer "Yes" or "No".