

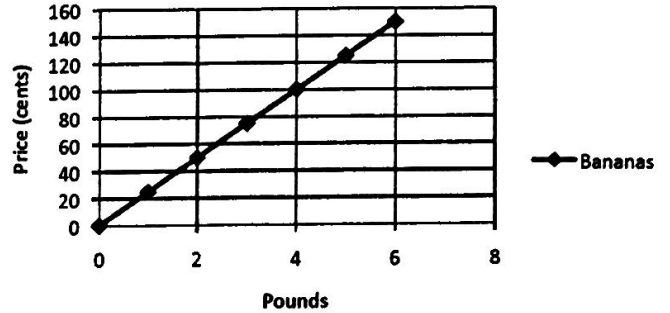
Find the unit rates for each given situation.

1. Gabrielle bikes 6 miles in  $\frac{1}{2}$  an hour. 1. \_\_\_\_\_  
 2.  $\frac{1}{3}$  gallon of paint covers  $\frac{1}{9}$  of a wall 2. \_\_\_\_\_

Using the graph below, answer questions 3 and 4.

3. What is the constant of proportionality?  
 4. What does (0, 0) represent in this situation?

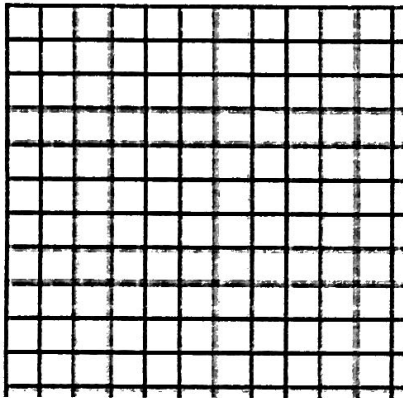
Cost of Bananas



Create a graph for each table below then determine if the sets are proportional. Explain how you used your graph to get your conclusion.

5.

a	1	3	5	7
b	2	4	6	8

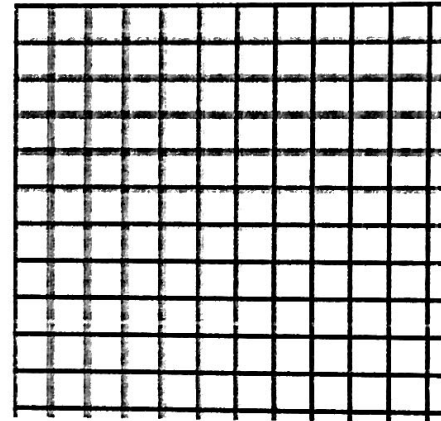


Proportional? \_\_\_\_\_

Explain: \_\_\_\_\_

6.

X	1.5	3	3.75	6
Y	1	1.5	2.5	4



Proportional? \_\_\_\_\_

Explain: \_\_\_\_\_

In questions 7 and 8 use the tables to find ratios and determine if the sets are proportional to each other. Explain how you used your tables to get your conclusion. If the table represents a proportional relationship, write an equation for it.

7. c = Number of chocolates, m = Number of minutes

c	2	4	6	8
m	4	8	12	16

Proportional? \_\_\_\_\_

Explain and show proof:

Equation: \_\_\_\_\_  
(if necessary)

8. x = number of minutes, y = cost in dollars

x	0	3	4	8	12
y	2	5	6	10	14

Proportional? \_\_\_\_\_

Explain and show proof:

Equation: \_\_\_\_\_  
(if necessary)

**Determine if the ratios are proportional. Write "yes" or "no" and justify.**

9.  $\frac{3}{4}$  and  $\frac{24}{32}$  \_\_\_\_\_

10.  $\frac{5}{6}$  and  $\frac{15}{18}$  \_\_\_\_\_

**Determine which is the "better buy" by finding the unit price of each and comparing them.**

11. sodas: 12 for \$2.89 or 24 for \$6.00 11. \_\_\_\_\_

12. socks: 3 pairs for \$10 or 8 pairs for \$16.99 12. \_\_\_\_\_

**Solve each proportion for the variable, using the method of your choice.**

13.  $\frac{3}{4} = \frac{x}{12.8}$

14.  $\frac{61}{x} = \frac{5}{10}$

13. \_\_\_\_\_

14. \_\_\_\_\_

**For each word problem, write a proportion and then solve it to find the answer. Label your final answers.**

15. A recipe calls for 2 eggs to make 10 pancakes. How many eggs are needed to make 35 pancakes? 15. \_\_\_\_\_

16. Sandra drove 126.2 miles in 2 hours at a constant speed. How long would it take her to drive 189.3 miles at the same speed? 16. \_\_\_\_\_

17. Eight oranges cost \$1.00. How much will 5 dozen oranges cost? 17. \_\_\_\_\_

18. In order to determine her pulse rate, June's nurse counted 18 beats in her pulse in 15 seconds. At this rate, how many beats would she have in 60 seconds? 18. \_\_\_\_\_

19. Ed earned \$112 for 8 hours of work. At this rate, how much will he earn for 40 hours of work? 19. \_\_\_\_\_

20. Mary is preparing for her college entrance exams. In a practice test, she answered 12 problems in 30 minutes. At this rate, how many questions can she expect to answer in 150 minutes? 20. \_\_\_\_\_