

Proportional Reasoning Homework

Name KEY

The following tables show proportional relationships. Fill in the missing blanks for each.

1)

Miles	30	60	90	120
Hours	1	2	3	4

2)

Dollars	3.50	7.00	10.50	14.00	17.50	21.00
Gallons	1	2	3	4	5	6

3)

Teachers	2	3
Students	20	30

4)

Pages	60	150
Minutes	30	75

5) The coordinate (4,5) is proportional to the following coordinates:

(0, 0) (8, 10) (12, 15) (2, 2.5)

6) Jared wants to make 36 cookies but only has a recipe for 24. Fill in the blanks so that he could make 36 cookies that taste the same as his original recipe.

Recipe for 24 cookies	Recipe for 36 cookies
1 cup butter	1.5
2½ cups sugar	3.75
2 eggs	3
½ teaspoon baking powder	0.75
2¼ cup flour	3.375
¼ teaspoon salt	0.375

Reviewing Proportionality

- 7) The cost of renting video games from Games, Inc. is shown in the table. Determine whether the cost is proportional to the number of games rented. If it is proportional, write an equation. If it is not proportional, explain.

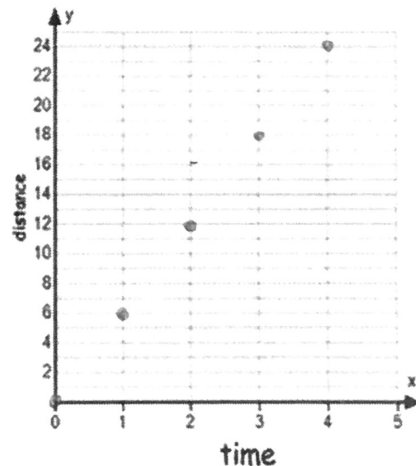
Not Proportional

Cost per game not consistent

Number of Games	Cost (\$)
1	3
2	5
3	7
4	9

- 8) The slowest mammal on the earth is the tree sloth. It moves at a rate of 6 feet per minute. Determine whether the number of feet the sloth moves is proportional to the number of minutes it moves by graphing on the coordinate plane.

Time (min)	0	1	2	3	4
Distance (feet)	0	6	12	18	24



Proportional
Straight line
+
origin

- 9) Determine the average speed for each of the following:

- a) Drove from 4:45pm until 6:00pm and traveled 75 miles

$$\frac{75 \text{ mi}}{1.25 \text{ hr}} = 60 \text{ mph}$$

- b) Drove from 7:50am until 10:20am and traveled 105 miles

$$\frac{105 \text{ mi}}{2.5 \text{ hr}} = 42 \text{ mph}$$