

Identifying Proportional and Nonproportional Relationships

1. You have been hired by your neighbors to babysit their children on Friday night. You are paid \$8 per hour. Complete the table relating your pay to the number of hours you worked.

Hours worked	Pay
1	
2	
3	
4	
4.5	
5	
6	
6.5	

Based on the table above, is pay proportional to hours worked? How do you know?

2. The table below represents the amount of snow fall in 5 counties (in inches) to hours of a recent winter storm. Determine if y is proportional to x . Justify your answer.

x Time (hrs.)	y Snowfall (in.)
2	10
6	12
8	16
2.5	5
7	14

3. Laycee is planning to drive from New Jersey to Florida. Laycee recorded the distance traveled and the total number of gallons used every time she stopped for gas. Assume miles driven is proportional to gallons used in order to complete the table.

Gallons used	2	4		8	10	12
Miles Driven	54		189	216		

4. In each table below determine if y is proportional to x . Explain why or why not.

a)

x	y
3	12
5	20
2	8
8	32

b)

x	y
3	15
4	17
5	19
6	21

c)

x	y
6	4
9	6
12	8
3	2

5. The table shows the relationship between the number of parents in a household and the number of children in the same household. Is the number of children proportional to the number of parents in the household? Explain why or why not.

Number of Parents	Number of Children
0	0
1	3
1	5
2	4
2	1