

Name _____

Date _____

Recognizing Proportional Relationships - Step-by-Step Lesson

The table below gives the shipping price for different numbers of soccer balls. Do the numbers in the table represent a proportional relationship?



Number of Balls	Price (In Dollars)
1	2
2	4
3	6
4	7

Explanation:

Step 1) We could do this in two ways:

- a) by testing for an equivalent ratios in the table
- b) by graphing the table to see if it creates a straight line through the origin.

Step 2 a) we can examine the numbers to determine that the price is the number of balls multiplied by 2, except for 4 balls. The row with 4 balls costs \$7. This is not proportional to the other amounts in the table; therefore, the table does not represent a proportional relationship.

Step 2 b) we can graph relationships to determine if two quantities are in a proportional relationship and to interpret the ordered pairs. If the amounts from the table above are graphed (number of balls, price), the pairs (1, 2), (2, 4), and (3, 6) will form a straight line through the origin (0 balls, 0 dollars), indicating that these pairs are in a proportional relationship. The ordered pair (3, 6) means that 3 balls cost \$6. However, the ordered pair (4, 7) would not be on the line, indicating that it is not proportional to the other pairs.

