Comparing Proportional Relationships

Problem # 1
Which proportional relationship is increasing at a greater rate?

Store A

# of apples purchased	0	1	2	3
Total cost	$.00	$.40	$.80	$1.20

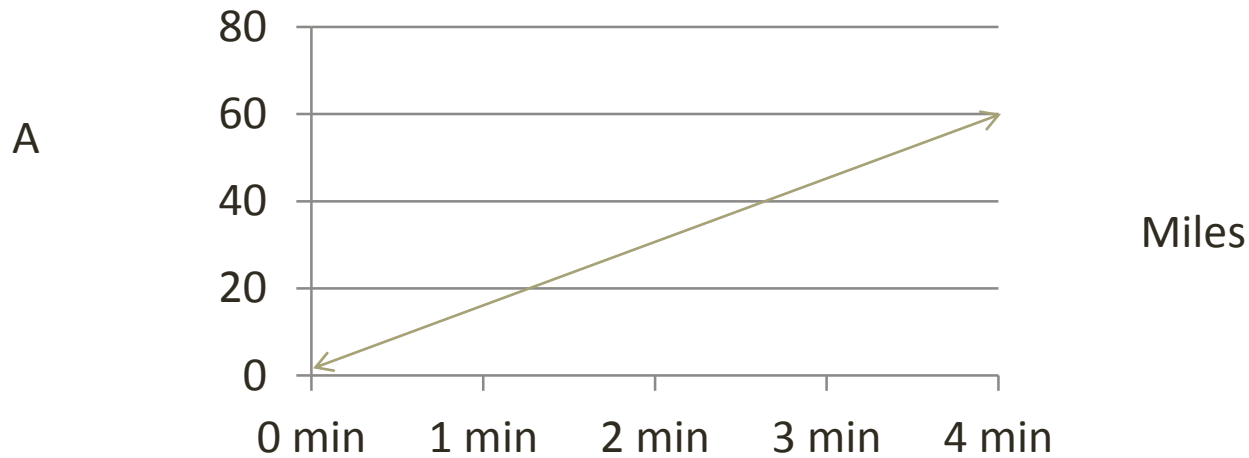# Store B offers apples for $.50 each.

Answer for Problem 1

Store B has a greater increase since it goes up $.50 per apple where the table shows an increase of only $.40 per apple.

Problem 2

Which proportional representation is increasing slower?

Miles

A

Miles

B   Elmer drives at a steady pace. After 6 minutes he has gone 80 miles.

Answer to problem 2.

Proportional relationship B is slower. 80 miles / 6 minutes = 13.33 miles per min. Relationship A increased by 15 miles every min (60 miles / 4 min = 15).

Explanation

Proportional relationships can be represented in words, equations, tables, or graphs. All you need to do is find the *unit rate* of change by dividing. Once you have the unit rate of change it is easy to compare relationships. **Remember**, it is only proportional if the data is linear and goes through the point (0,0).