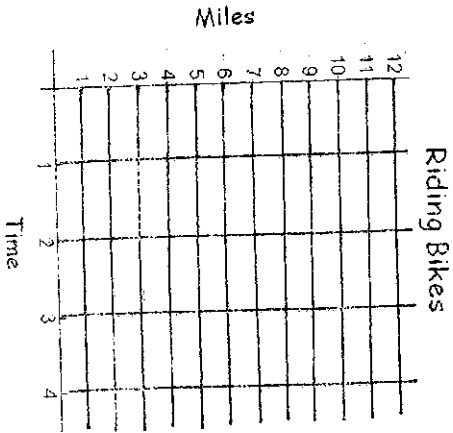


Unit Rates and Proportional Relationships

Grandma Betty rode her bike on the Tobacco Trail. It took her 4 hours to ride 12 miles. Assume she rode at a constant rate of speed during her exercise.

Time (x) domain	Miles (y) range
4	12



You move up _____ units for each 1 unit you move to the right.
 You move up 2 ● _____ units for each 2 units you move to the right.
 You move up 3 ● _____ units for each 3 units you move to the right.
 You move up 4 ● _____ units for each 4 units you move to the right.

Starting from (0, 0), to get to a point (x, y) on the graph, you will go up x ● _____ units for every x units you have moved to the right.

Therefore, $y = x \bullet$ _____, so $y =$ _____

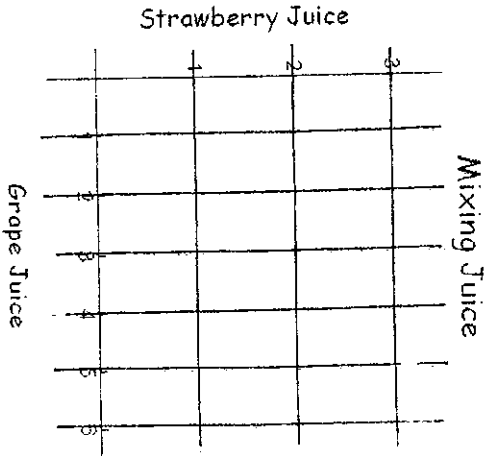
What is the ordered pair where $x = 12$? (1, _____)
 What does it stand for?

Grandma Betty doesn't always ride 12 miles, but she always goes the same pace. Use your equation to find the missing information based on the given information of different exercise sessions.

- A. Grandma Betty rode for 6 hours and 30 minutes. How far did she go?
- B. Grandma Betty rode her bike for 15.75 miles. How long did it take her? Can you convert your answer to hours and minutes?

For every 6 cups of grape juice, mix in 3 cups of strawberry juice.

Cups of grape juice (x) domain	Cups of strawberry juice (y) range
6	3



You move up _____ units for each 1 unit you move to the right.
 You move up 2 ● _____ units for each 2 units you move to the right.
 You move up 3 ● _____ units for each 3 units you move to the right.
 You move up 4 ● _____ units for each 4 units you move to the right.

Starting from (0, 0), to get to a point (x, y) on the graph, you will go up x ● _____ units for every x units you have moved to the right.

Therefore, $y = x \bullet$ _____, so $y =$ _____

What is the ordered pair where $x = 12$? (1, _____)
 What does it stand for?

You want to make different sized batches of juice that have the same exact flavor and strength as your original batch. Use your equation to find the missing amount of juice needed.

- A. 23 cups of grape juice. How many cups of strawberry juice will you need?
- B. 19 cups of strawberry juice. How many cups of grape juice will you need?