

Name: _____

Date: _____ Class: _____

Who is faster, Sandra or Michael?

Use the data in a ratio table to compare runners. Create a graph using the data from the ratio table to compare two runners speed. With careful comparison, you will be able to determine the speed of the two runners.

Sandra

| | | | | | | |
|-------------------------|---------------|---|----|----|----|----|
| Distance (miles) (y) | 4 | 8 | 12 | 16 | 20 | 24 |
| Time (hours) (x) | $\frac{1}{2}$ | | | | | |

Michael

| | | | | | | |
|-------------------------|---------------|---|----------------|---|----|----|
| Distance (miles) (y) | 2 | 4 | 6 | 8 | 10 | 12 |
| Time (hours) (x) | $\frac{1}{2}$ | | $1\frac{1}{2}$ | | | |

Task: Using unit rate and proportional relationship to determine the speed of two runners.

1. Create a graph and plot the coordinates for each runner.
2. Determine whether the distance to time for both runners are in proportional relationship. Explain.
3. Determine how fast both runners are traveling per hour.
4. How long would it take both runners to run 12 miles?
5. How far both runners ran in one and half hour?
6. What is the constant of proportionality for both runners?