



Use each of the following methods to solve the problem shown below:

- **Diagram**
- **Algebraic Equation**

Justin is preparing to take supplies out to Scott and Shawn who are on a training run. Justin needs to determine where and when to meet the men. Scott and Shawn set up camp at two different places on the trail, Scott at checkpoint A and Shawn one mile down the trail at checkpoint B. This morning, Scott left camp early and ran 10 miles before Shawn left checkpoint B. If Scott runs at 4 miles per hour and Shawn runs at 7 miles per hour, how long will it take Shawn to catch up with Scott? How far down the trail should Justin meet them so he can deliver supplies?

Diagram:

Algebraic Equation: