

Speed and Velocity Practice Problems

Name _____

Points to remember

- **Speed** is a measurement of motion. In order to solve for speed, you need to know the distance travelled and the amount of time it took.
- **Constant speed** is speed that is not changing...55 miles per hour. A constant speed graph is a straight line.
- **Velocity** is basically the same thing as speed, except that a direction is given.
- You can **combine velocities** by adding or subtracting...like paddling a canoe downstream or upstream. If you are paddling with the current add your velocity with the stream's velocity. If you are paddling against the current subtract the velocity of the stream from your velocity.

Directions-Solve the following problems using the 4 step method...don't forget units!

1. Mr. J and I are going fishing in Marquette, which is 80 miles away. How fast will we be going to make it there in 1.5 hours?

2. How far can you go if you are travelling at 55 mph for 3 hours?

3. How long will it take to get to Escanaba, which is 76 miles away if we travel at 55 mph?

4. The movie theater is 5 miles away and the movie starts at 4:00. If you travel at a constant speed of 50 mph what time will you have to leave to reach the theatre on time?

5. Mr. Herman and I are fishing in a canoe on the Iron River. We decide to move to a new location by paddling downstream at 12 mph. The river is moving 6 mph, what is our total speed?

6. If Mr. Herman and I decide to turn around and paddle upstream at 6 mph, how far will we have travelled in .5 hours?

7. Is a car travelling at 55 mph gaining speed, losing speed, or travelling at a constant speed?

8. Mrs. Yake is on her way to Houghton, which is 110 miles away. How fast will she need to go to make it there in 2.5 hours?

9. How far can we go if we travelling at 65 mph for 4 hours?

10. How long will it take to get to Green Bay, which is 99 miles away if we travel at 55 mph?

11. I have an appointment in St. Ignace at 10am. St. Ignace is 130 miles away and the speed limit is 55 mph. What time will I have to leave Iron Mountain to make it to my appointment?