Appendix A: Pre/Post Speed Quiz Answer Key

1. A submarine travels 600 meters in 2 hours, what is the speed of the submarine? Once speed is solved, convert the speed to cm per hour (circle your answer).

   Speed = Distance / Time

   $$v = \frac{x}{t} = \frac{600\ m}{2\ hr} = 300\ \frac{m}{hr}$$

   $$300\ \frac{m}{hr} \times \left(\frac{100\ cm}{m}\right) = 30,000\ \frac{cm}{hr}$$

2. If Johnny Football runs 40 yards in 6.3 seconds, how fast is he moving? Round your answer to the nearest hundredth.

   $$v = \frac{x}{t} = \frac{40\ yd}{6.3\ s} = 6.35\ \frac{yd}{s}$$

3. If I live 3 miles from school and leave my house at 8:20am, how fast will I need to drive to be there by 8:30am? (Your answer can be in miles per minute or miles per hour)

   $$v = \frac{x}{t} = \frac{3\ mi}{10\ min} = 0.3\ \frac{mi}{min}$$

   $$0.3\ \frac{mi}{min} \times \left(\frac{60\ min}{hr}\right) = 18\ mph$$

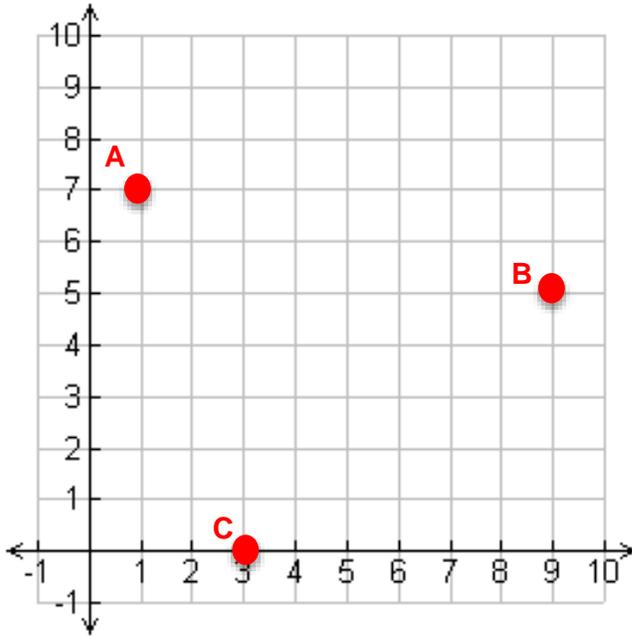4. If Justin Bieber is driving his car 55 miles per hour for 5 hours, how far will he have traveled?

   $$x = v \times t = (55\ mph) \times (5\ hr) = 275\ miles$$

5. SpongeBob swims 10 miles per hour and gets to a town 75 miles away. How long did it take him?

   $$t = \frac{x}{v} = \frac{75\ mi}{10\ mph} = 7.5\ hr$$

On the graph below, graph the following points and label them. A (1,7) B (9,5) C (3,0)

6. Which vehicle is moving faster, A or B?