

(COPYING IS NOT ALLOWED!) YOU MUST SHOW ALL WORK FOR CREDIT!

1. What is your average speed in meters/second be if you traveled 220 km in 2.25 hr?

2. A bird can fly 30 km/hr. How many hours does it take it to fly 22,000 m?

3. A typical land snail's speed is 12.2 meters per hour. How many miles will the land snail travel in one day (24 hrs)?

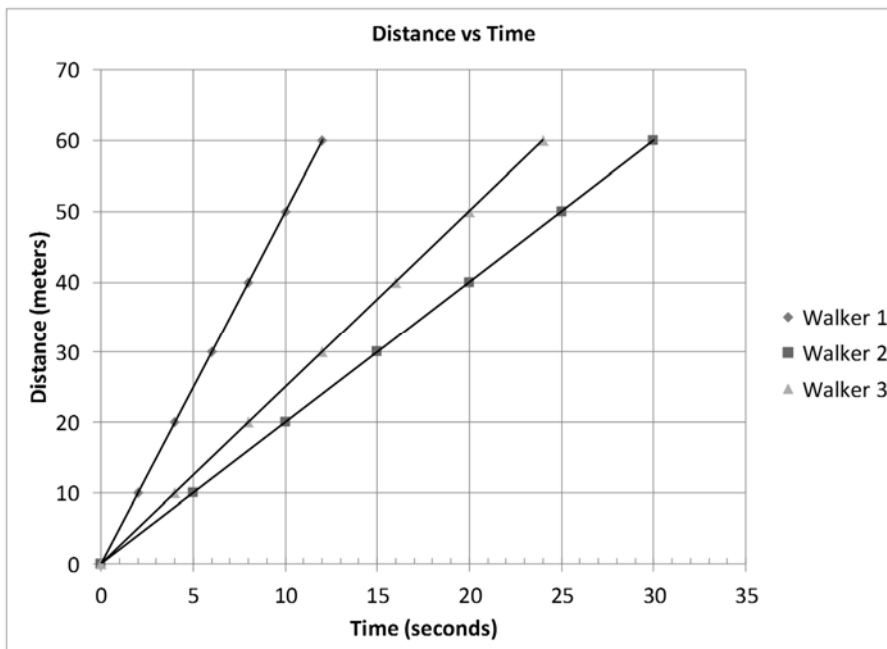
4. What can you determine from the slope of graph of distance versus time?

5. The average distance from the Earth to the Sun is  $1.5 \times 10^8$  kilometers. The speed of light in a vacuum is  $3.0 \times 10^8$  m/s. How long in **minutes** does it take sunlight to travel from the sun to the Earth?

6. A person jogs eight laps around a quarter mile track in a total time of 13.5 minutes. Calculate the runner's average speed in m/s.

7. An airplane travels 2100 km at a speed of 1000 km/hr. It then encounters a headwind that slows it to 800 km/hr for the next 1300 km. What is the average speed for this trip? (The answer is NOT 900 km/hr.)

8. Using the distance time graph below



a. Rank the walkers in order from fastest to slowest and explain how you determined this.

b. Determine the average speed of walker 1.