Name: Date: Period:

Problem Solving Method Practice

Equations

$$\bar{s} = \frac{\Delta x}{\Delta t} \qquad \bar{v} = \frac{\Delta x}{\Delta t} \qquad \Delta x = x - x_0$$

$$1\,\mathrm{m/s} = 3.6\,\mathrm{km/h}$$

Problem Solving Method

1. Picture
2. Knowns/Unknowns
3. Check units
4. Pick an equation (solve algebraically)
5. Plug & Chug
6. Answer wit units

Problems

1. A certain object has a velocity of 25 km/h.
   (a) How much time will it take to fly 150 m?
   (b) How about 360 m?

2. An airplane travels 2100 km at a velocity of 720 km/h and then encounters a tailwind that boosts its speed to 990 km/h for the next 2800 km.
   (a) What was the total time of the trip?
   (b) what was the airplane's average velocity?