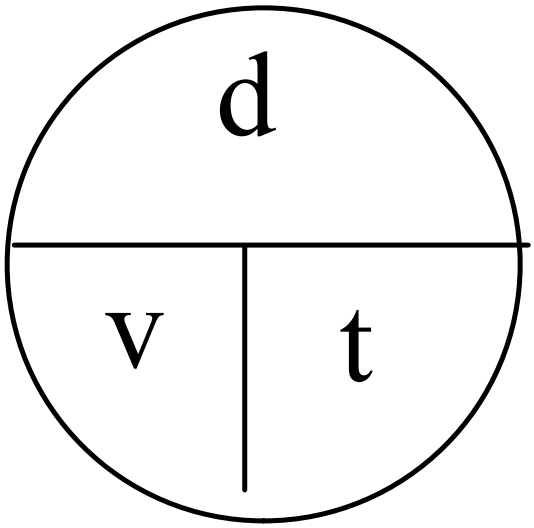
Calculating Uniform Motion

$$\text{speed} = \frac{\text{distance}}{\text{time}}$$

OR

$$v = \frac{d}{t}$$



$$v = \frac{d}{t}$$

$$d = v \times t$$

$$t = \frac{d}{v}$$

Science 1206 Calculating Uniform Motion

1. Convert the following.

a) 2.5 hours into seconds

b) 128 km into meters

c) 55 km/hr into m/s

d) 12 m/s into km/hr

e) 1.3 hours into seconds

f) 1 256 m into kilometers

g) 120 km/hr into m/s

h) 150 m/s into km/hr

1. A car travelling at 120 km/hr drives for 2.5 hours. How far has it travelled?

2. A bicyclist starts at +5.0 m and finishes at - 4.0 m in 2.0 s. What is her speed?

3. What is the average speed of an airplane that flies 1250 km in 2.2 hours?

5. How long does it take a car to travel 345 km if it travels at 65 km/hr?

6. What is the average speed of a car that travels at 85 km/hr for 1.0 hour, and then 120 km/hr for 2.0 hours?*be careful. what is the total distance? what is the total time?

7. Jon's new motorcycle moves 22.5 m in 2.1 s. Pete's motorcycle can move 28.5 m in 2.7 s.

Whose motorcycle is faster? By how much?

8. How far does a car travelling at 85km/h go in 17 minutes?

9. How long will it take to travel 1.5km if your speed is 23 m/s?

Practice...

Page 358 # 4, 6, 7, 8