

010 Velocity Problems

key

(1)

$$\frac{D}{40 \mid 3} = 120 \text{ km}$$

(2)

$$\frac{240 \text{ miles}}{30 \text{ mph} \mid 8 \text{ hr}}$$

(3)

$$\frac{540.0 \text{ km}}{V \mid 6 \text{ hr}} \quad V = 90 \text{ km/hr}$$

(4)

$$\frac{100 \text{ m}}{V \mid 10.6 \text{ sec}} \quad V = 9.4 \text{ m/s}$$

(5)

$$\frac{20.00 \text{ km}}{V \mid 4.00 \text{ hr}} \quad V = 5 \text{ km/hr}$$

(6)

$$\frac{144.00 \text{ km}}{V \mid 3.00 \text{ hr}}$$

$$V = 48 \text{ km/hr}$$

(7)

$$\frac{576 \text{ km}}{V \mid 6.00 \text{ hr}}$$

$$V = 96 \text{ km/hr}$$

max 90 km/hr

Yes Brake

Speed Limit

(8)

25,992 miles	
V	24 hr

$$V = 1,083 \text{ mph}$$

(9)

100.00 m	
V	30 sec

$$V = 3.33 \text{ m/s}$$

(10)

2.00 m	
V	15 sec

$$V = 0.133 \text{ m/s}$$

(11)

D	
18.00 $\frac{\text{km}}{\text{hr}}$	2.00 km

$$D = 36.0 \text{ km}$$

(12)

300 miles	
45 $\frac{\text{mi}}{\text{hr}}$	?

$$t = 6.67 \text{ hr}$$

No missed it By
40 min

(13)

D = 136 m	
8.00 $\frac{\text{m}}{\text{s}}$	17 sec

(14)

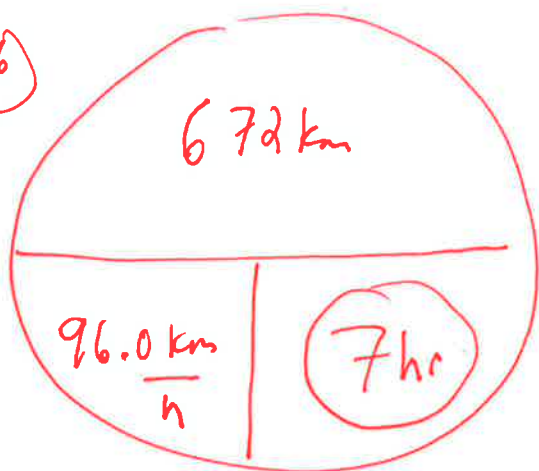
$$15.00 \text{ mi} = 0.250 \text{ hr}$$

D = 2.25 km	
9.00 $\frac{\text{km}}{\text{hr}}$	0.250 hr

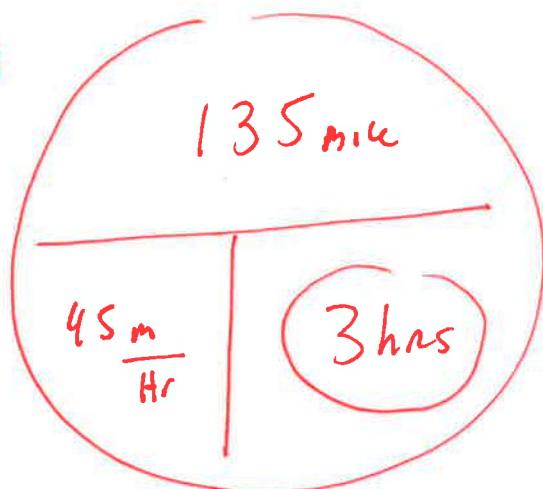
15



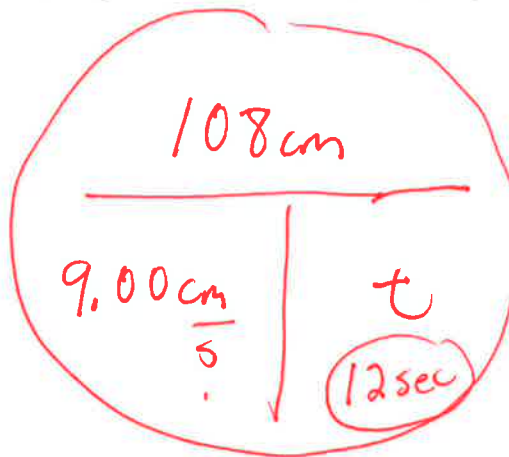
16



17



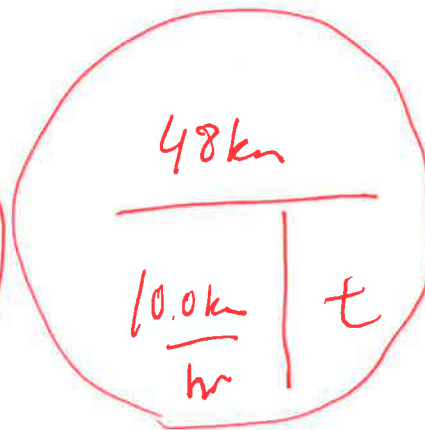
18



19



$t = 4.5 \text{ hr}$
Neil



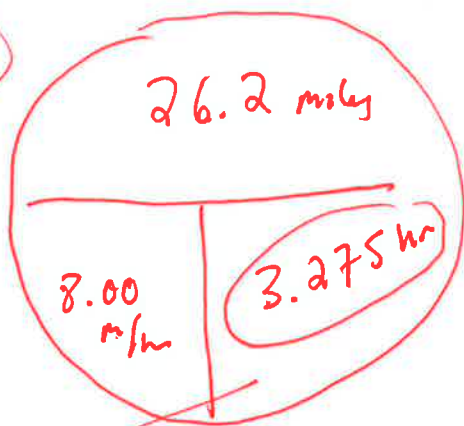
$t = 4.8 \text{ hr}$
Grant

Grant Quickest

$$4.8 - 4.5 = 0.3 \text{ hr}$$

$$0.3 \text{ hr (60 min)} = \boxed{18 \text{ min}}$$

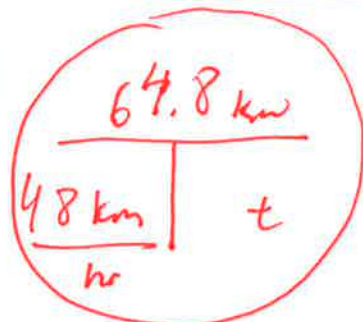
(20)



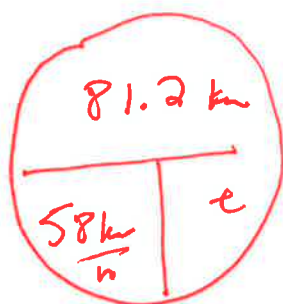
3 hrs $.275 \times 60 = 16.5 \text{ min}$

3 hrs 16.5 min

(21)



Mr. 1.35 hr



Mag. 1.4 hr

Mr. Dunne 1st

$$1.4 \text{ hr} - 1.35 \text{ hr} = 0.05 \text{ hr}$$

$$0.05 \text{ hr} \times \frac{60 \text{ min}}{1 \text{ hr}} = 3 \text{ min}$$

(22)



1.6 million
miles
Day

18.53 miles
second

$$\frac{1.6 \text{ million}}{\text{Day}} \times \frac{\text{Days}}{24 \text{ hr}} = 66.7 \text{ Thousand miles per hour}$$