

Homework
Section.

Section 1.7: Modeling with functions

10/23/2017

{ p 149 # 25 Individual
p 149 # 26-27-28-29 Group work

$$d = r \cdot t \quad (\text{rate/velocity})$$

distance ← ↓ → time
 rate

#25 $t = ?$ $t = \frac{d}{r} = \frac{182 \text{ mi}}{52 \text{ mi/h}} = 3.5 \text{ h.}$

$d = r \cdot t$

$$d_L + d_I = d_{\text{Total}}$$

x time spent on L.
 y time spent on I.

$$45x + 55y = 560$$

$$x + 2 = y$$

$$4.5 + 2 = y$$

$$45x + 55(x + 2) = 560$$

$$6.5 = y$$

$$45x + 55x + 110 = 560$$

hours on interstate

$$\frac{100x}{100} = \frac{450}{100} = 4.5 = x$$

Local

25)

$v =$
 $r = 52 \text{ mph. (rate/velocity/speed)}$

$d = 182 \text{ mi (distance)}$

$t = ?$

$$d = r \cdot t$$

$$t = \frac{d}{r} = \frac{182 \text{ mi}}{52 \text{ mi/h}} = 3.5 \text{ hours.}$$