

2b)  $2^{\circ}\text{C} \rightarrow -6^{\circ}\text{C}$  in 4H.  
 $-8^{\circ}\text{C} \rightarrow 4^{\circ}\text{C}$  in 3H

$$m = \frac{-8}{4} = -2^{\circ}\text{C}/\text{Hour}$$

$$m = \frac{12}{3} = 4^{\circ}\text{C}/\text{Hour}$$

Point  $(x, y)$   
 $(t, ^{\circ}\text{C})$   
 $\rightarrow (0, 2)$

$(0, -8)$

$$y - y_1 = m(x - x_1)$$

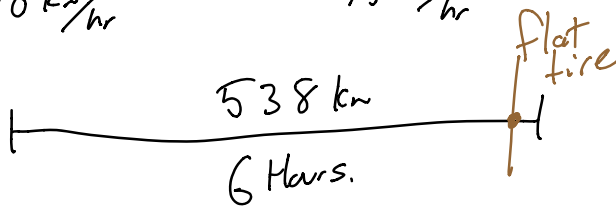
$$y = mx + b$$

$$y = -2x + 2$$

$$y = 4x - 8$$

Before flat  
 $90 \text{ km/hr}$

Spare tire  
 $75 \text{ km/hr}$



$$\text{distance} = (\text{velocity})(\text{time})$$

$$d_1 = 90 \text{ km/hr } t_1$$

$$d_2 = 75 \text{ km/hr } t_2$$

$$d_1 + d_2 = 538 \text{ km}$$

$$t_1 + t_2 = 6$$

$$t_1 = 6 - t_2$$

$$538 = 90 \frac{\text{km}}{\text{hr}} t_1 + 75 \frac{\text{km}}{\text{hr}} t_2$$

$$538 = 90(6 - t_2) + 75 t_2$$

$$538 = 540 - 90 t_2 + 75 t_2$$

$$538 - 540 = -15 t_2$$

$$\frac{-2}{-15} = t_2$$

$$.13 \text{ hours} = t_2$$

$$t_1 = 6 - t_2$$

$$t_1 = 6 - .13$$

$$t_1 = 5.87$$

$$d = vt$$

$$528.3 \text{ km} = 90(5.87)$$

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(6)  $k = 45 + 15 \frac{\text{cm}}{\text{hr}}$       b

$N = 25 \frac{\text{cm}}{\text{hr}}$       m

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$$\text{One} = .12 \frac{\text{¢}}{\text{km}} + 19$$

$$\text{Two} = \$42.50$$

$$\text{One} = \text{Two}$$

$$.12x + 19 = 42.50$$

$$x = \frac{42.50 - 19}{.12}$$

$$x = 196$$