

7.1.1

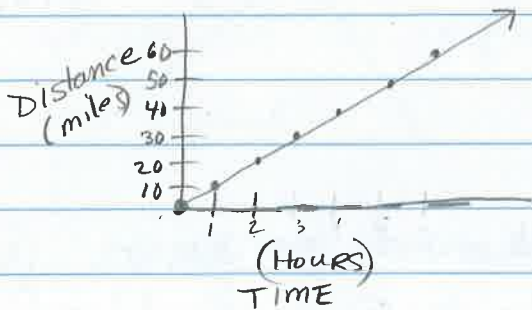
Hwk

7-10) $7\frac{1}{2}$ hrs. to drive 412.5 miles at a constant speed.

$$\frac{412.5 \text{ m}}{7.5 \text{ hrs}} = \frac{55 \text{ miles}}{1 \text{ hr.}} \quad \left(\frac{55 \text{ miles per hr.}}{55 \text{ mph}} \right)$$

$\xrightarrow{\div 7.5}$

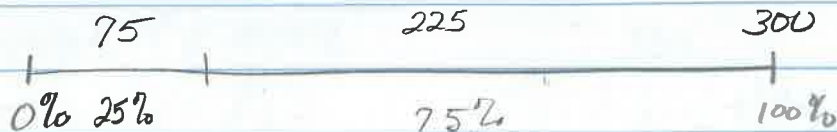
7-11) 10 miles per hour



7-12) 25% bring lunch from home = 75

225 students do not bring lunch from home = 75%

How many students attend the school? 300 students



$$\frac{75}{100} \xrightarrow{\times 3} \frac{225}{X}$$

$$\frac{25}{100} \xrightarrow{\times 3} \frac{X}{300}$$

75 bring lunch from home

7-13)

$$\begin{aligned}
 a) & \overbrace{(-3)} + \overbrace{4x} + \overbrace{2} + \overbrace{2x} + \overbrace{2x} \\
 & \overbrace{(-3)} + \overbrace{2} + \overbrace{4x} + \overbrace{2x} + \overbrace{2x} \\
 & -1 + 8x \text{ or } 8x - 1
 \end{aligned}$$

$$\begin{aligned}
 b) & -8x + 4 + (-3) \\
 & -8x + 1
 \end{aligned}$$

$$\begin{aligned}
 c) & \overbrace{7x^2} + \overbrace{3x} + \overbrace{4} + \overbrace{7x^2} + \overbrace{3x} + \overbrace{4} \\
 & 14x^2 + 6x + 8
 \end{aligned}$$

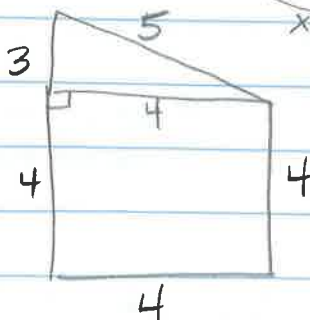
$$\begin{aligned}
 d) & 5(x-4) \\
 & 5x - 20
 \end{aligned}$$

7-14) See text 1500 words per hour
 85 words possible in 5 min? Yes!

$$\begin{aligned}
 & \xrightarrow{\div 12} \\
 & \frac{1500 \text{ words}}{60 \text{ min}} = \frac{x}{5 \text{ min}} \quad x = 125 \text{ words in 5 min.} \\
 & \xrightarrow{\div 12}
 \end{aligned}$$

$$\frac{125 \text{ word}}{5 \text{ min}} = \frac{25 \text{ words}}{1 \text{ min}}$$

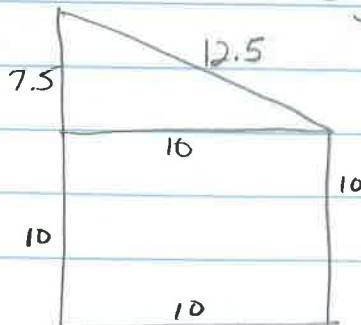
7-15) $P = 20 \text{ ft}$
 $A = 22 \text{ ft}^2$



$\times 2.5$

$P = 50 \text{ ft}$
 $A = 137.5 \text{ ft}^2$

ENLARGED By 2.5



$$(2.5)^2 = 6.25$$

note
 * that the area is $(2.5)^2$ larger.
 Perimeter is just 2.5 larger.