

7.1.7

HWK

7-80) \$8 to \$15

$$\frac{7}{8} = 0.875 \quad 87.5\%$$

7-81)

a)  $0.85x = 200$  (100)

$$85x = 20,000$$

$$x = 235.29$$

b)  $\frac{7}{6}x = 140$

(6)  $\frac{7}{6}x = 140(6)$

$$\frac{7x}{7} = \frac{840}{7}$$

$$x = 120$$

7-82)

a) median 77

b)  $Q1 = 62$        $Q3 = 83$

c) IQR = 21

d) mean = 73.36

$$\begin{aligned} A &= bh \\ &= 85 \cdot 40 \\ &= 3400 \text{ft}^2 \end{aligned}$$

Area ↗

7-83)

a)

$$\frac{\text{Area} = 3,400 \text{ft}^2}{2x+5} \times$$

perimeter = 250 ft.

$$2x+5+2x+5+x+x=250$$

$$6x+10=250$$

$$\begin{array}{r} -10 \quad -10 \\ \hline 6x = 240 \\ \hline x = 40 \end{array}$$

x = width = 40 ft.

$$2x+5 = 2(40)+5 = 85 \text{ft. Length}$$

$$x = 40$$

$$7-84) \quad 3x - 3 \geq 2x + 3$$

a)  $x = -3$        $3x - 3 \geq 2x + 3$   
NO

$$\begin{array}{r} \phantom{3x} - 3 \phantom{\geq} 2x + 3 \\ \phantom{3x} + 3 \phantom{\geq} \phantom{2x} + 3 \\ \hline 3x \geq 2x + 6 \\ -2x \phantom{\geq} -2x \\ \hline x \geq 6 \end{array}$$

b)  $x = 9.5$   
true

c)  $x = 6$   
true

d)  $x = 10\frac{1}{2}$   
True

$$7-85) \quad 3 \text{ slices in } 5 \text{ min.}$$

$$\frac{3}{5}x = 12$$

$$(5) \frac{3}{5}x = 12(5)$$

$$3x = 60$$

$$x = 20 \text{ min. to eat } 12 \text{ slices (whole pizza)}$$

$$\begin{array}{r} \xrightarrow{x6} \\ 3 \text{ slices} \quad 18 \text{ slices} \\ \hline 5 \text{ min} \quad 30 \text{ min} \\ \xrightarrow{x6} \end{array}$$

$$18 \text{ slices in } 30 \text{ min.}$$