

6.1.4  
HWK

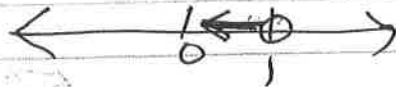
(6-42)

a)  $3x - 3 < 2 - 2x$

$$5x - 3 < 2$$

$$5x < 5$$

$$x < 1$$



b)  $\frac{4}{5}x \geq 8$

$$\frac{5}{4} \cdot \frac{4}{5}x \geq 8 \cdot \frac{5}{4}$$

$$1x \geq \frac{40}{4}$$

$$x \geq 10$$



(6-43)  $3x - 2 < 2 - 2x$

$$5x - 2 < 2$$

$$5x < 4$$

a)  $5x < 4$   
 $5(2) < 4$   
 $10 < 4$   
NO

b)  $5x < 4$   
 $5(\frac{1}{2}) < 4$   
 $2\frac{1}{2} < 4$   
Yes

c)  $5x < 4$   
 $5(-3) < 4$   
 $-15 < 4$   
Yes

d)  $5x < 4$   
 $5(\frac{2}{3}) < 4$   
 $\frac{10}{3} < 4$   
 $3\frac{1}{3} < 4$   
Yes

6-44)

$$a) \frac{xyz}{(-2)(-5)(3)} \\ \frac{10 \cdot 3}{30}$$

$$b) \frac{3(x+y)}{3(-2+-5)} \\ \frac{3(-7)}{-21}$$

$$c) \frac{2+2}{y} + 1$$

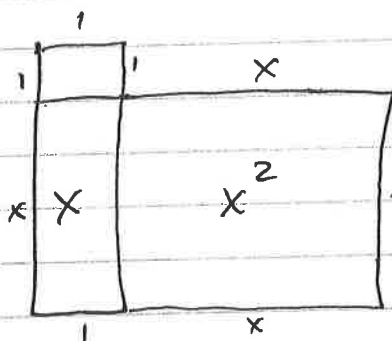
$$\frac{3+2}{-5} + 1$$

$$\frac{5}{-5} + 1$$

$$-1 + 1$$

0

6-45)



$$a) x = 7 \text{ cm} \\ P = 4x + 4 \\ = 4(7) + 4 \\ = 28 + 4 \\ = 32 \text{ cm}$$

$$b) x = 5.5 \text{ cm} \\ P = 4x + 4 \\ P = 4(5.5) + 4 \\ = 22 + 4 \\ = 26 \text{ cm}$$

6-47) pool, 30 gal H<sub>2</sub>O, after 5 min  $\frac{1}{4}$  full

$$a) 30 \div 4 = 7.5 \div 5 = 1.5 \text{ gal}$$

$$4 \times 5 = 20 \text{ min.}$$

$$30 \div 1.5 \text{ gal} = 20 \text{ min.}$$

20 min. total

$\frac{1}{4}$	5 min
$\frac{1}{4}$	5 min
$\frac{1}{4}$	5 min
$\frac{1}{4}$	5 min