

homework 7-54 through 7-60

7-54

a) $5x - 10 = \frac{65}{2}$

$$5x - 10 = 32.5$$

$$5x = 42.5$$

$$x = 8.5$$

b) $4x - 2 = 3x + 9$
 $x = 11$

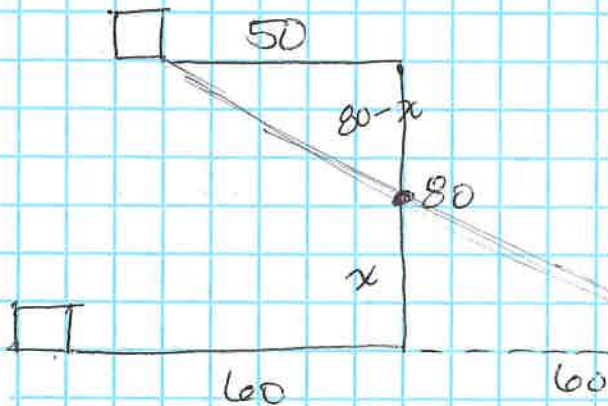
c) $9x - 3 + 3x + 15 = 180$
 $12x + 12 = 180$
 $12x = 168$
 $x = 14$

7-55

a) $\frac{360}{72} = 5$ sides

b) $\frac{360}{9} = 40^\circ$

7-56



$$\frac{60}{50} = \frac{x}{80-x}$$

$$50x = 60(80-x)$$

$$50x = 4800 - 60x$$

$$110x = 4800$$

$$x \approx 43.64$$

from library
 ≈ 36.36 from art
museum

7-57

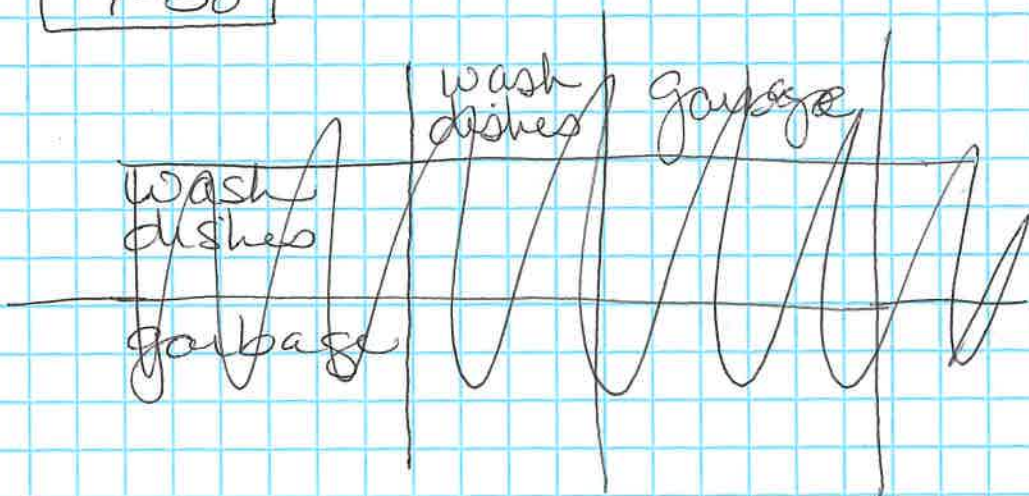
a) 40, 60, 80, ...

$$a_n = 20n + 20$$
$$y = 20x + 20$$

b) 3, $\frac{3}{2}$, $\frac{3}{4}$, ...

$$a_n = 6\left(\frac{1}{2}\right)^n$$
$$y = 6\left(\frac{1}{2}\right)^x$$

7-58



a) $P(\text{Not both chores}) = (.7)(.7) = .49$

49%

b) $P(\text{garbage, Not dishes}) = (.3)(.7)$

= .21
21%

7-59

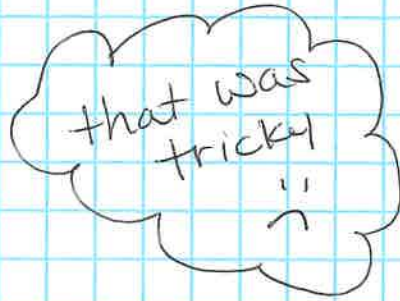
a) SSS \sim

b) ASA \cong

c) SSS \cong

d) AA \sim

(12 in and 12 feet
are not \cong)



7-60

Rotate 180°

Translation

