

9.2,3

HWK

9-77)  $SA = 46 \text{ sq. un}$  or  $46 \text{ un}^2$   
 $VOL = 15 \text{ un}^3$  or  $15 \text{ cubic units}$

9-78)

a)  $A = \pi r^2$

$$= 3.14 \cdot 8^2$$

$$= 3.14 \cdot 64$$

$$= 200.96 \text{ cm}^2$$

ON A CALCULATOR

$$\approx \pi \cdot 64 = 201.06 \text{ cm}^2$$

b)  $A = \pi r^2$

$$= 3.14 \cdot 30^2$$

$$= 3.14 \cdot 900$$

$$= 2826 \text{ cm}^2$$

ON A CALCULATOR

$$\approx \pi \cdot 900 = 2827.43 \text{ cm}^2$$

9-79)

a)  $\frac{5}{1250} = \frac{1}{250}$  or  $\frac{1250}{5} = \frac{250}{1}$

b)  $\frac{250}{1} = \frac{x}{2}$

$$x = 500 \text{ inches or } 41 \text{ ft } 8 \text{ in.}$$

c) 102 floors

9-80)

a)  $8^2 + 7^2 = 64 + 49 = 113$

b)  $7^2 \cdot 7 \cdot 7 = 49 \cdot 49 = 2401$

c)  $\left(\frac{1}{2}\right)^2 + \left(\frac{2}{3}\right)^2 = \frac{1}{4} + \frac{4}{9} = \frac{9}{36} + \frac{16}{36} = \frac{25}{36}$

d)  $(2^2 + 6)^2 = (4 + 6)^2 = 10^2 = 100$

e)  $-4 \cdot 3^2 - 2 = -4 \cdot 9 - 2$

$$= -36 - 2$$

$$= -38$$

$$f) x - x = 0$$

$$g) 3 \cdot 3 \div 3 = 9 \div 3 = 3$$

$$h) 4x + x - 2x$$

$$= 5x - 2x$$

$$= 3x$$

$$i) -2 \cdot 4 \div 4$$

$$= -8 \div 4$$

$$= -2$$

$$9-81) \quad 29 = 8.75 + 2.25x$$

$$-8.75 \quad -8.75$$

$$\hline 20.25 = 2.25x$$

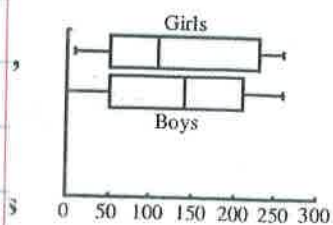
$$2.25 \quad 2.25$$

$$\hline 9 = x$$

9 rides

9-82)

a) Center, shape and spread are nearly identical for both groups; median of boys may be about 30 pages higher, but that difference is very small when compared to variability; both distributions are symmetric; IQR is about 160-180 pages; neither group has outliers.



b) It cannot be concluded that girls read more. The difference of 30 pages is less than  $\frac{1}{4}$  of an IQR.