

9.2.1

HWK

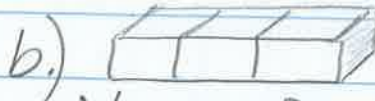
9-55) a) NO b) Yes c) NO d) Yes

9-56)



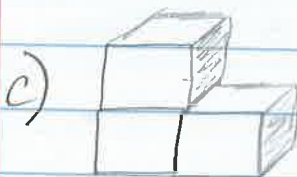
$$V = 1 \text{ in}^3$$

$$SA = 6 \text{ in}^2$$



$$V = 3 \text{ in}^3$$

$$SA = 14 \text{ in}^2$$



$$V = 3 \text{ in}^3$$

$$SA = 14 \text{ in}^2$$

9-57)

a) $\$1.20x + \$1.50y$

b) $\$1.20x + \$1.50y$
 $1.20(3) + 1.50(2)$

$$3.60 + 3.00$$

$\$6.60$ total cost

9-58) Space Shuttle 122 ft long x 78 ft.

a) $122 \times 12 = 1464$ inches

b) $\frac{1 \text{ cm}}{10 \text{ m}} = \frac{x}{1464 \text{ in}}$ $x = 146.4 \text{ cm}$

c) $\frac{1 \text{ cm}}{10 \text{ in}} = \frac{x}{178 \text{ ft} \cdot \frac{12 \text{ in}}{1 \text{ ft}}}$

d) $\frac{146.4 \text{ cm}}{2.54 \text{ cm}} = \underline{\underline{57.64 \text{ in}}}$

$$\frac{1 \text{ cm}}{10 \text{ in}} = \frac{x}{936 \text{ in}} \quad x = 93.6 \text{ cm}$$

9-59) 

$$A = \pi r^2$$

$$= 3.14 \cdot 7^2$$

$$= 3.14 \cdot 49$$

$$= 153.86 \text{ cm}^2$$

$$C = \pi d$$

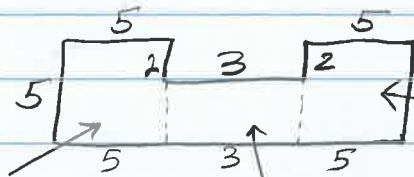
$$= 3.14 \cdot 14$$

$$= 43.96 \text{ cm}$$

approx 44 cm

9-60)

a)



$$A = bh$$

$$= 5 \cdot 5$$

$$= 25 \text{ units}^2$$

$$A = bh$$

$$= 3 \cdot 3$$

$$= 9 \text{ units}^2$$

$$A = bh$$

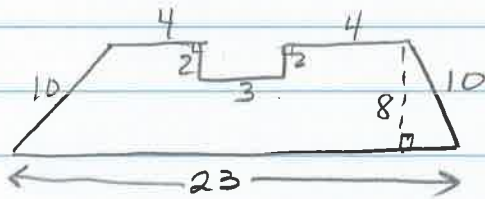
$$= 5 \cdot 5$$

$$= 25 \text{ units}^2$$

Area total = $25 + 9 + 25 = \underline{59 \text{ units}^2}$

Per = $5 + 5 + 2 + 3 + 2 + 5 + 5 + 13 = \underline{40 \text{ units}}$

b)



$$A = \frac{1}{2} h (b_1 + b_2)$$

$$= \frac{1}{2} 8 (23 + 11)$$

$$= \frac{1}{2} 8 (34)$$

$$= 4 \cdot 34$$

$$= 136$$

subtract small rectangle at top

$$A = bh$$

$$= 3 \cdot 2$$

$$= 6$$

$$136 - 6 = \underline{130 \text{ units}^2}$$

Area

Perimeter = $23 + 10 + 4 + 2 + 3 + 2 + 4 + 10 = \underline{58 \text{ units}}$