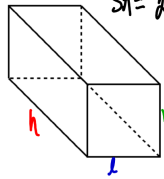


7.1 Surface Area

Rectangular Prism

$$SA = 2lw + 2lh + 2wh$$

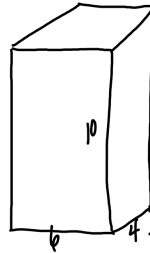


$$SA = 2(3 \cdot 2) + 2(3 \cdot 5) + 2(2 \cdot 5)$$

$$SA = 2(6) + 2(15) + 2(10)$$

$$SA = 12 + 30 + 20$$

$$SA = 62 \text{ units}^2$$



$$SA = 2(10 \cdot 6) + 2(10 \cdot 4) + 2(6 \cdot 4)$$

$$SA = 2(60) + 2(40) + 2(24)$$

$$SA = 120 + 80 + 48$$

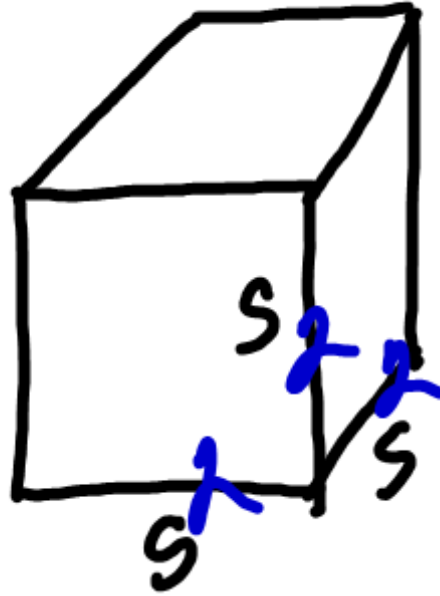
$$SA = 248 \text{ units}^2$$

double²
 x 2²
 4 Quadruple

triple²
 x 3²
 9 times

Cube

$$SA = 6s^2$$

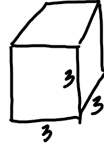


$$SA = 6(2)^2$$

$$SA = 24 \text{ units}^2$$

Volume
Cube

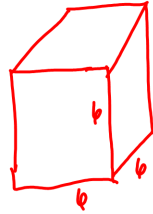
$$V = s^3$$



$$V = 3^3$$

$$V = 27 \text{ units}^3$$

Double
each side



$$V = 6^3$$

$$V = 216 \text{ units}^3$$

8 times

double³

$\times 2^3$

8 times

triple

$$9 \times 9 \times 9$$

$$V = 9^3$$

$$V = 729 \text{ units}^3$$

Original
 $V = 27 \text{ units}^3$

27 times

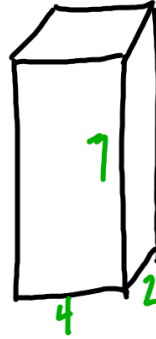
triple,

$\times 3^3$

27

Volume
Rectangular Prism

$$V = lwh$$



$$V = 7(4)(2)$$

$$V = 56 \text{ units}^3$$

Double each side

$$V = 14(8)(4)$$

$$V = 448 \text{ units}^3$$

Double₃
x2

8 times

$$V = 24 \text{ m}^3$$

$$SA = 2(24) + 2(2) + 2(12)$$

$$\frac{SA}{V} = \frac{2'' \times 12'' \times 1''}{24} = \frac{19}{6}$$

$$SA = 48 + 4 + 24$$

$$SA = 76 \text{ m}^2$$

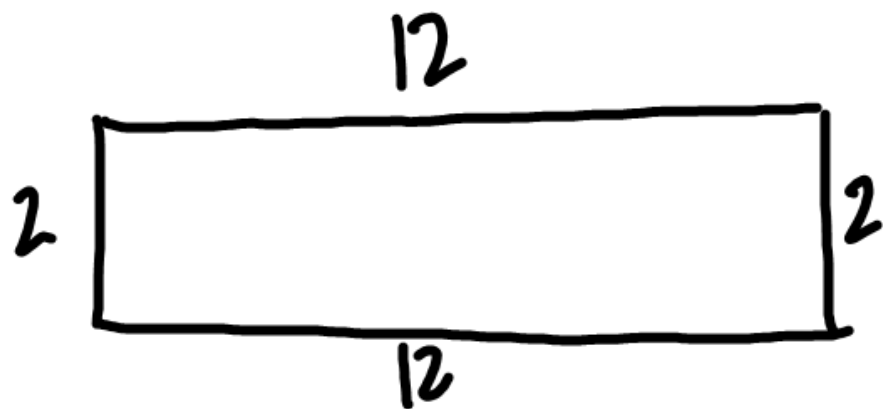
$$V = 24 \text{ m}^3$$

$$SA = 2(24) + 2(6) + 2(4)$$

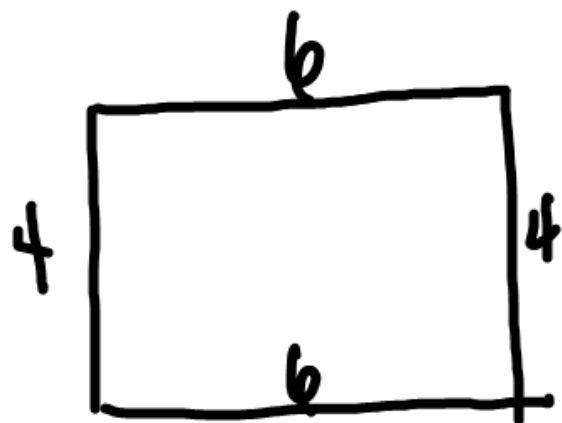
$$4 \times 6 \times 1$$

$$SA = 48 + 12 + 8$$

$$SA = 68 \text{ m}^2$$



$$P = 28 \text{ ft}$$



$$P = 20 \text{ ft}$$

p 434

12-26 A