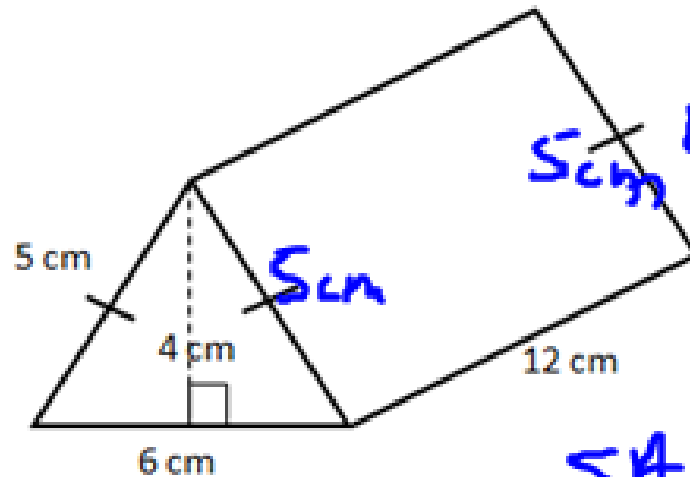


Get out your homework and have it ready to check. Warm Up on #2 and #3 from your homework.

2) Find the surface area of the triangular prism. SHOW WORK AND LABEL.



$$B = \frac{1}{2}(6)(4) = 12 \text{ cm}^2 \times 2$$

$$A \text{ of R+L} \square = 5(12) = 60 \text{ cm}^2$$

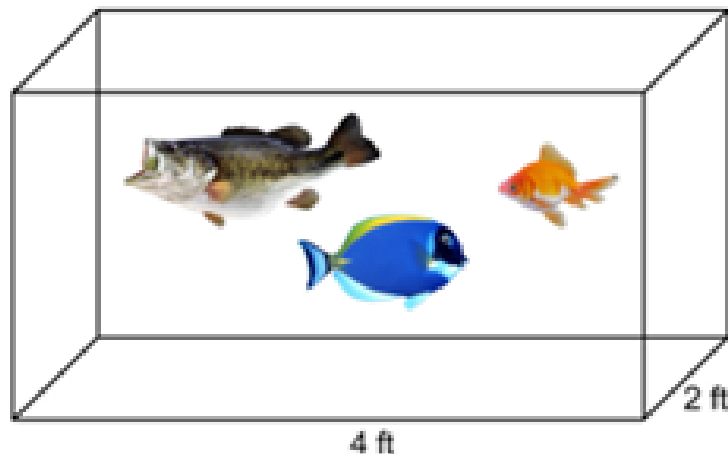
$$60(2) = 120 \text{ cm}^2$$

$$A \text{ of B} \square = 6(12) = 72 \text{ cm}^2$$

$$SA = 12 + 12 + 120 + 72 = 216 \text{ cm}^2$$

3) Use the picture below to answer the following problems. SHOW WORK AND LABEL.

A) Find the surface area of the fish tank. There is no top on the fish tank.



$$A \text{ of Bottom} \square = 4(2) = 8 \text{ ft}^2$$

$$V = 4(3)(2) = 24 \text{ ft}^3$$

$$A \text{ of R+L} \square = 3(2) = 6 \text{ ft}^2 + 2(2) = 12 \text{ ft}^2$$

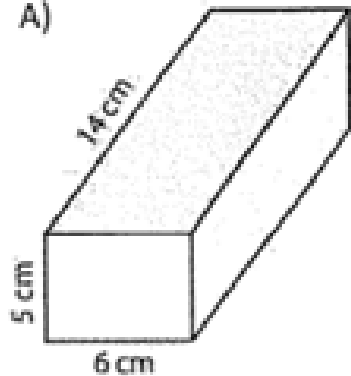
$$A \text{ of F+B} \square = 4(3) = 12 \text{ ft}^2 + 2(2) = 24 \text{ ft}^2$$

$$SA = 8 + 12 + 24 = 44 \text{ ft}^2$$

B) Find the volume of the fish tank.

1) Find the surface area and volume of the following 3D solids.

A)



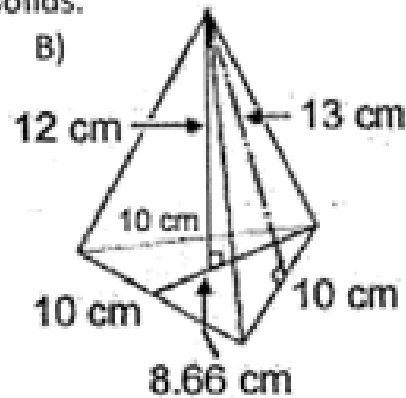
$$S.A. = 2(14)(5) + 2(14)(6) + 2(5)(6)$$
$$SA = 140 + 168 + 60 = 368$$

$$S.A. = \underline{368 \text{ cm}^2}$$

$$V = 14(5)(6) \quad V = Bh$$

$$V = \underline{420 \text{ cm}^3} \quad V = lwh$$

B)



$$P = 30 \text{ cm} \quad L.A. = \frac{1}{2}(30)(13) = 195 \text{ cm}^2$$

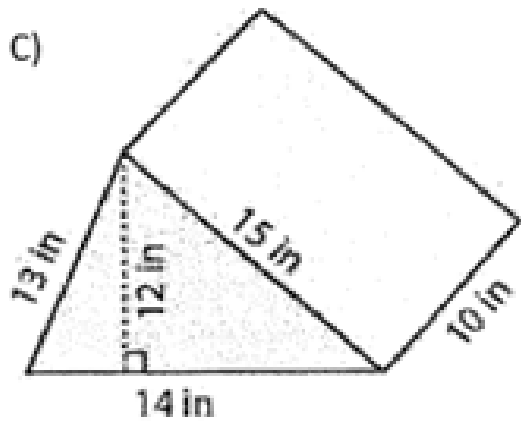
$$B = \frac{1}{2}(10)(8.66) = 43.3 \text{ cm}^2$$

$$SA = 195 + 43.3 = 238.3$$

$$S.A. = \underline{238.3 \text{ cm}^2}$$

$$B = 43.3 \text{ cm}^2 \quad V = \frac{1}{3}(43.3)(12)$$

$$V = \underline{173.2 \text{ cm}^3}$$



$$A_{\text{of } \Delta} = \frac{1}{2}(14)(12) = 84 \text{ in}^2 \quad (2) = \underline{168 \text{ in}^2}$$

$$A_{\text{of } R} = 14(10) = \underline{140 \text{ in}^2}$$

$$A_{\text{of } B} = 14(10) = \underline{140 \text{ in}^2}$$

$$A_{\text{of } L} = 13(10) = \underline{130 \text{ in}^2}$$

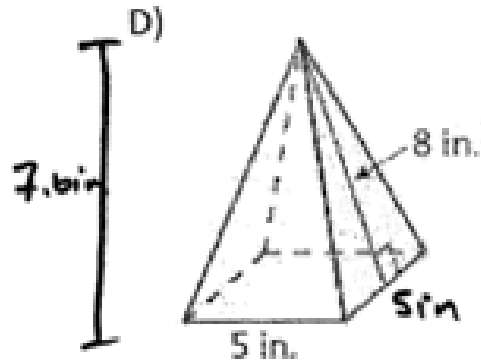
$$S.A. = \underline{50 \text{ in}^2}$$

$$\underline{588 \text{ in}^2}$$

$$B = \frac{1}{2}(12)(14) = 84 \text{ in}^2$$

$$V = 84(10)$$

$$V = \underline{840 \text{ in}^3}$$



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

$$L.A. = \frac{1}{2}(20)(8)$$

$$L.A. = 80 \text{ in}^2$$

$$B = 5(5) = 25 \text{ in}^2$$

$$S.A. = 80 + 25 = 105 \text{ in}^2$$

$$S.A. = \underline{105 \text{ in}^2}$$

$$B = 5(5) = 25 \text{ in}^2$$

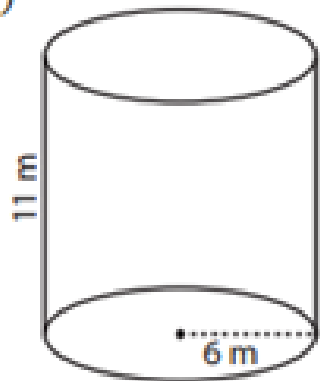
$$V = 25(7.6 \text{ in})$$

$$V = \underline{190 \text{ in}^3}$$

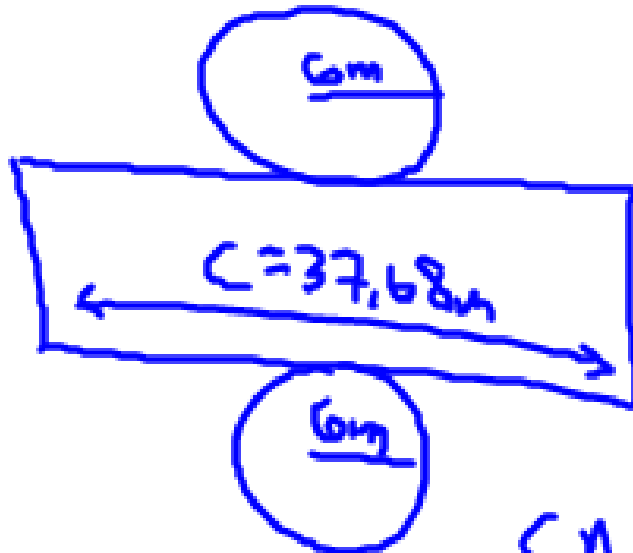
$$V = \underline{63.3 \text{ in}^3} \quad V = \frac{1}{3}(25)(7.6)$$

Draw your own net with the correct dimensions of the cylinder and find the surface area of the cylinders below. Round to the nearest tenth and use 3.14 for pi. SHOW WORK and LABEL

1)



$$d = 12\text{ m}$$



$$C = 3.14(2)(6) = 37.68\text{ m}$$

$$LA = 37.68(11) = \underline{414.48\text{ m}^2}$$

(A of R)

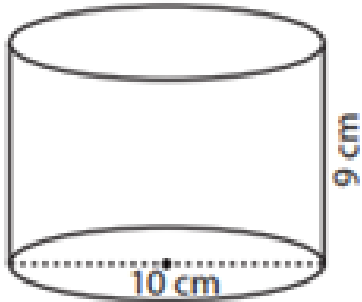
$$B = 3.14(6^2) = \underline{113.04\text{ m}^2}$$

(A of O)

$$SA = 414.48 + 113.04 + 113.04$$

Surface Area = 640.6 m<sup>2</sup>

2)



$$r = 5 \text{ cm}$$

$$C = 3.14(10) = 31.4 \text{ cm}$$

$$LA = 31.4(9) = \underline{282.6 \text{ cm}^2}$$

$$B = 3.14(5^2) = \underline{78.5 \text{ cm}^2}$$

$$SA = 282.6 + 78.5 + 78.5 = 439.6 \text{ cm}^2$$

Surface Area =

$$\underline{439.6 \text{ cm}^2}$$

3) Find the volume and surface area of the entire can of tomatoes shown below. SHOW WORK and LABEL



$$B = 3.14(2^2)$$

$$B = 12.56 \text{ in}^2$$

$$V = 12.56(5.5)$$

$$V = 69.08 \text{ in}^3$$

$$C = 3.14(2)(2) = 12.56 \text{ in}$$

$$LA = 12.56(5.5) = \underline{69.08 \text{ in}^2}$$

$$B = 3.14(2^2) = \underline{12.56 \text{ in}^2}$$

$$SA = 69.08 + 12.56 + 12.56 = 94.2$$

$$V = Bh$$

Volume =

$$\underline{69.08 \text{ in}^3}$$

Surface Area =

$$\underline{94.2 \text{ in}^2}$$

4) What is the lateral surface area of the plastic label that wraps around the sweet peas can? *The top and bottom of the can are not covered by the plastic label.* SHOW WORK and LABEL



$$C = 3.14(2)(1) = 6.28 \text{ in}$$

$$LA = 6.28(2) = \underline{12.56 \text{ in}^2}$$

Surface Area of Label =  $\underline{12.56 \text{ in}^2}$