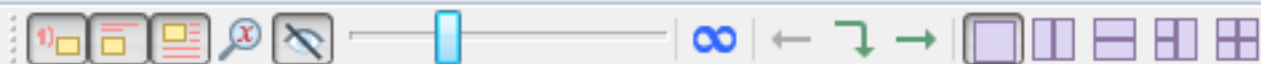




$$SA = 2\pi r^2 + 2\pi rh$$

$$V = \pi r^2 h$$



Find the surface area of each figure. Round to the nearest tenth.

1)



$$SA = 2\pi r^2 + 2\pi rh$$

$$SA = 2\pi (12)^2 + 2\pi (12)(9)$$

$$SA = 2\pi (144) + 678.58$$

$$SA = 904.78 + 678.58$$

$$SA = 1583.4 \text{ cm}^2$$

$$r = 12 \text{ cm}$$

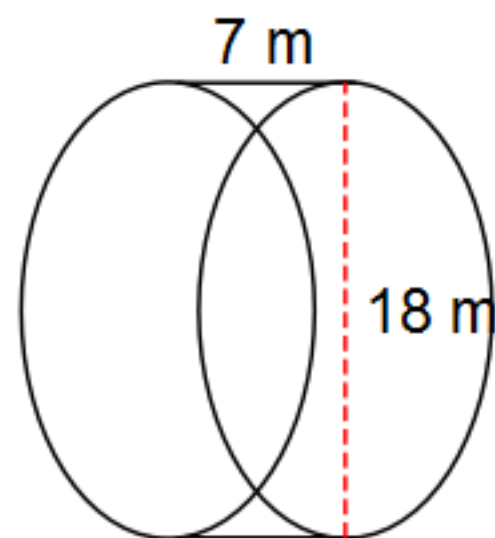
$$h = 9 \text{ cm}$$





Find the volume of each figure. Round to the nearest tenth.

5)



$$V = \pi r^2 h$$

$$V = \pi (7)^2 (18)$$

$$V = \pi (49) (18)$$

$$V = 1781.3 \text{ m}^3$$

$$r = 7$$

$$h = 18$$



Calibri (Body)

11

A

A

Aa

A

abc

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

B**I****U**

abc

 x_2 x^2

A

abc

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

A

Font

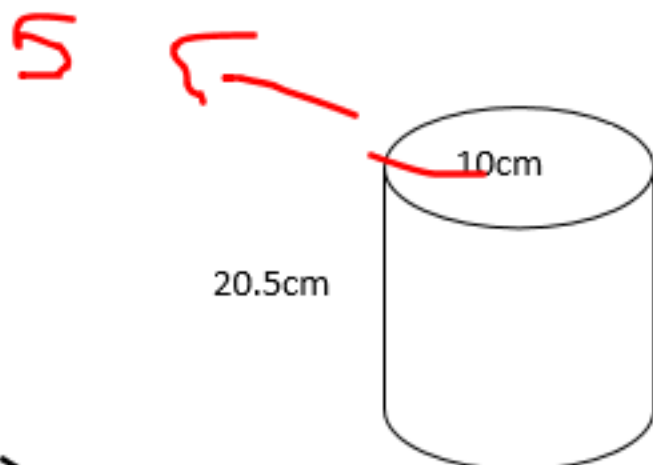
Paragraph

Styles

Editing

Challenge Yourself – Complete these for Bonus Marks!

1. If both of these cans of pizza sauce are cylinders, which is the better buy?



\$3.49



\$1.09

$$V = \pi r^2 h$$

$$V = \pi (5)^2 (20.5)$$

$$= 1610.1 \text{ cm}^3$$

one cm^3

$$1610.1 \div 3.49$$

$$= 461.30$$

$$V = \pi r^2 h$$

$$V = \pi (7.5)^2 (11)$$

$$V = 486.0 \text{ cm}^3$$

$$486.0 \div 1.09$$

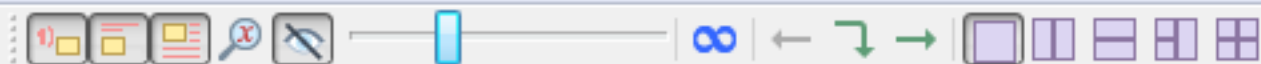
$$= 445.9$$

$$SA = 4\pi r^2$$



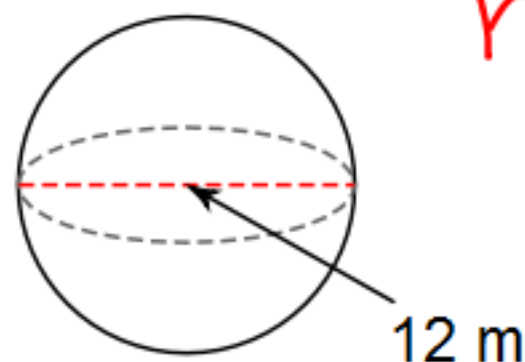
$$V = \frac{4\pi r^3}{3}$$





Find the surface area AND volume of each figure. Round to the nearest tenth.

1)



$$r = \frac{12}{2}$$

$$r = 6 \text{ m}$$

$$SA = 4\pi r^2$$

$$= 4(\pi)(6)^2$$

$$= 4(\pi)(36)$$

$$SA = 452.4 \text{ m}^2$$

$$V = \frac{4\pi r^3}{3}$$

$$V = \frac{4\pi(6)^3}{3}$$

$$V = \frac{4\pi(216)}{3}$$

$$= \frac{2714.3}{3}$$

$$V = 904.8 \text{ m}^3$$

