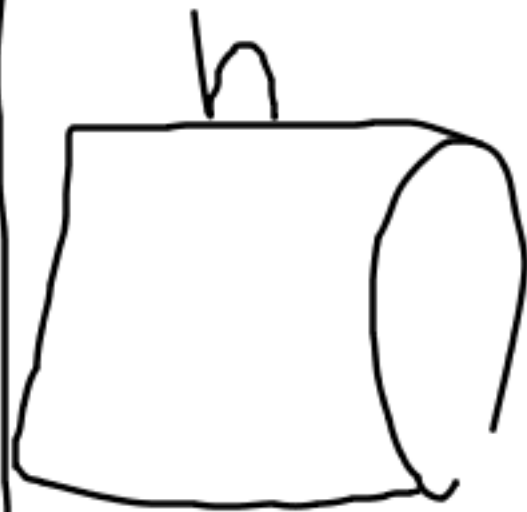


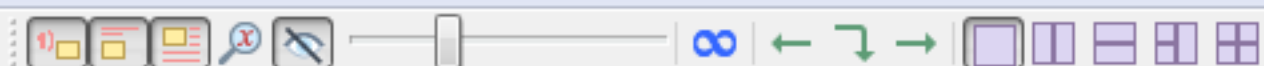
Surface Area and Volume of a cylinder



$$SA = \underbrace{2\pi r^2}_{\text{base/top}} + \underbrace{2\pi rh}_{\text{side}}$$

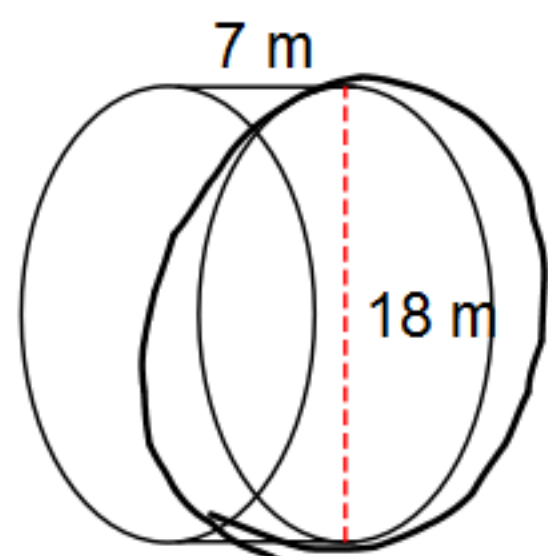
$$V = \pi r^2 h$$





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

5)



$$d = 18\text{ m}$$

$$r = 9\text{ m}$$

$$h = 7\text{ m}$$

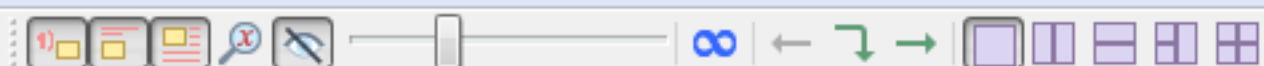
$$V = \pi r^2 h$$

$$V = (\pi) (9)^2 (7)$$

$$V = (\pi) (81) (7)$$

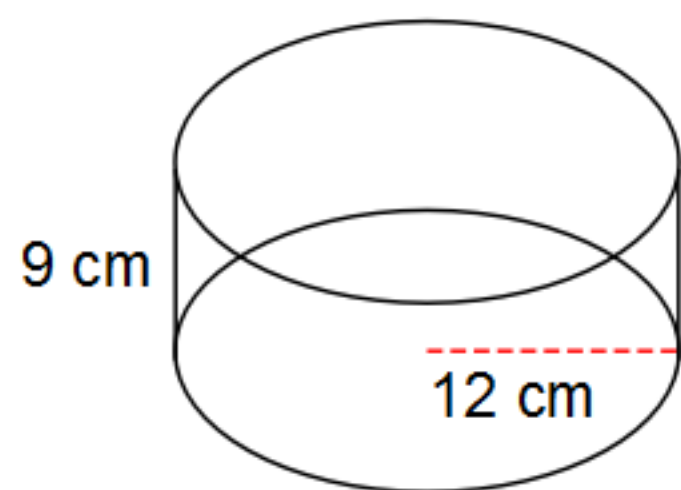
$$V = 1781.28$$

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



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

1)



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

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

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

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

$$SA = (2)(\pi)(144) + (2)(\pi)(12)(9)$$

$$SA = 904.778 + 678.584$$

$$SA = 1583.362$$

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