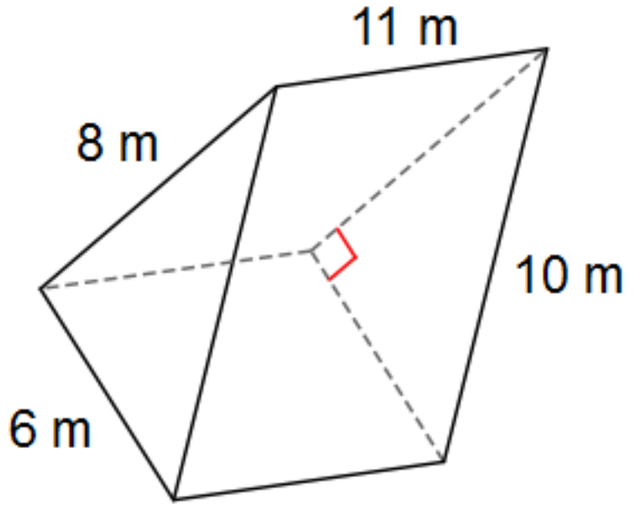
Find the surface area and volume of each figure. Round to the nearest tenth, and remembner that surface area is SQUARED and volume is CUBED.

If it helps you, draw out a net (or flattened verstion) of each square based pyramid or triangular prism.

6)



$SA = (\ell w) + (hw) + (bw) + (bh)$

$SA = (10)(11) + (8)(11) + (6)(11) + (6)(8)$

$SA = 110 + 88 + 66 + 68$

$SA = 312 m^2$

$V = \frac{bh\ell}{2}$

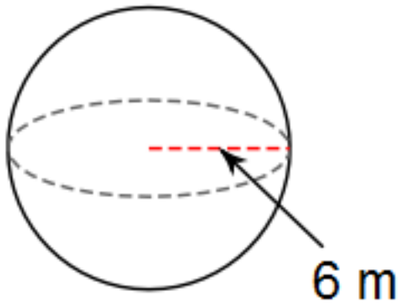
$V = \frac{(6)(8)(11)}{2}$

$V = 528 \div 2 = 264 m^3$

Show

Find the surface area of each cone, cylinder, or sphere. Round all final answers to the nearest tenth, and don't forget to include your units!

18)



$SA = 4\pi r^2$

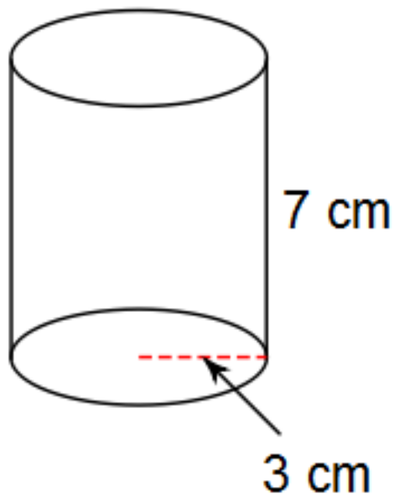
$= 4\pi(6^2)$

$= 452.4 m^2$

$r = 6m$

Find the surface area of each cone, cylinder, or sphere. Round all final answers to the nearest tenth, and don't forget to include your units!

19)



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

$= 2\pi(3^2) + 2\pi(3)(7)$

$= 56.54 + 131.9$

$= 188.4\ cm^2$

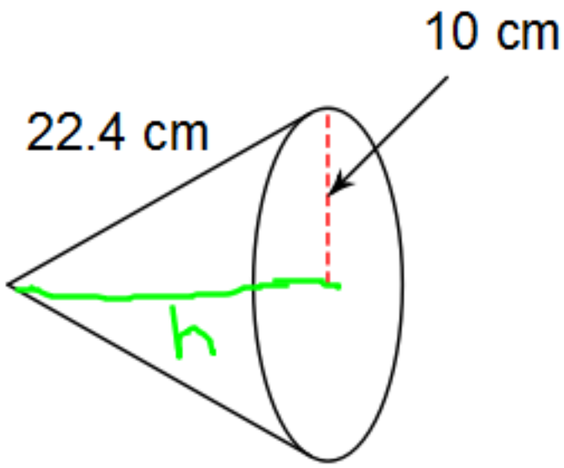
$r = 3cm$

$h = 7cm$

Show

Find the surface area of each cone, cylinder, or sphere. Round all final answers to the nearest tenth, and don't forget to include your units!

20)



$a^2 + b^2 = c^2$

$h^2 + 10^2 = 22.4^2$

$h^2 + 100 = 501.76$ -100 -100

$\sqrt{h^2} = \sqrt{401.76}$

$h = 20$

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

$= \pi(10)(22.4) + \pi(10^2)$

$r = 10\text{ cm}$

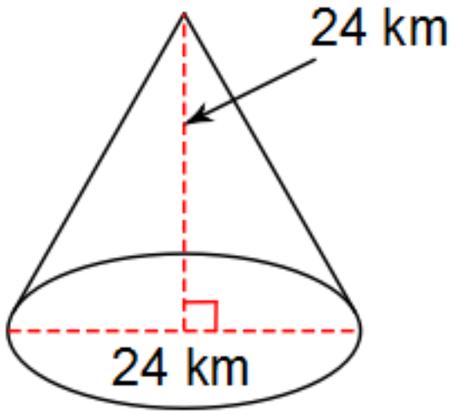
$s = 22.4\text{ cm}$

$SA = 1017.9\text{ cm}^2$

Show

Find the volume of each cone, cylinder, or sphere. Round all final answers to the nearest tenth, and don't forget to include your units!

21)



$$V = \frac{\pi r^2 h}{3}$$

$$= \frac{\pi (12^2)(24)}{3}$$

$$= \frac{10857.84}{3}$$

$$= 3619.1 \text{ km}^3$$

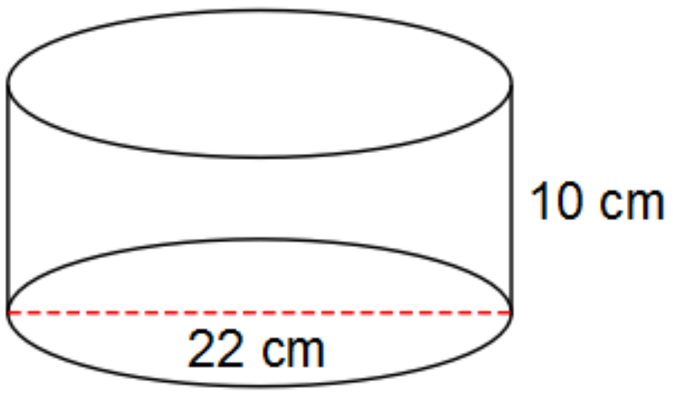
$r = \frac{24}{2} = 12\text{km}$

$h = 24\text{km}$

Show

Find the volume of each cone, cylinder, or sphere. Round all final answers to the nearest tenth, and don't forget to include your units!

22)



$V = \pi r^2 h$

$= \pi (11^2)(10)$

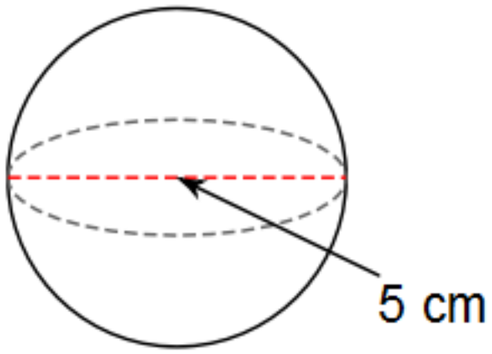
$= 3801.3 \text{ cm}^3$

$r = \frac{22}{2} = 11 \text{ cm}$

$h = 10 \text{ cm}$

Find the volume of each cone, cylinder, or sphere. Round all final answers to the nearest tenth, and don't forget to include your units!

23)



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

$$= \frac{4\pi (2.5^3)}{3}$$

$$= \frac{4\pi^3 (15.625)}{3}$$

$r = \frac{5}{2} = 2.5_{cm}$

$$= 65.4\ cm^3$$