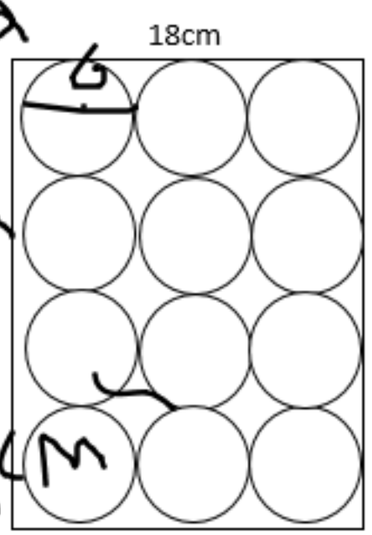
2. Cans of soup are often packaged in boxes (as shown below). Calculate the area that is wasted between all of the cans.




$A = \pi r^2$

$A \approx \pi 3^2$

$A = 28.26\text{cm}^2$

$(28.2)(12)$

$= 339$

$A = LW$

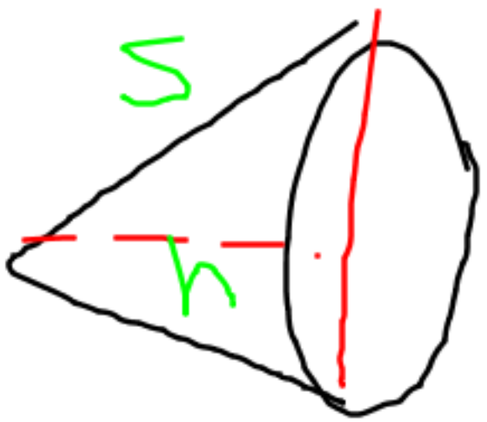
$A = (18)(24)$

$A = 432\text{cm}^2$

$432 - 339 = 92\text{cm}^2$

# Cone

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




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

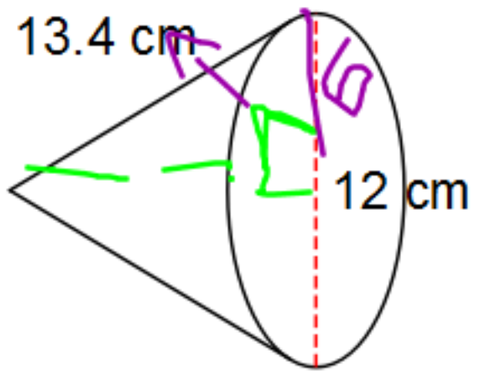
Find the surface area AND volume of each figure. Round to the nearest tenth.

$r = \frac{12}{2}$ $h = 12\,cm$

$r = 6$

$s = 13.4$

5)




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

$= \pi(6)(13.4) + \pi(6)^2$

$= 365.7\,cm^2$

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

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

$6^2 + b^2 = 13.4^2$

$-36 \quad -36$

$36 + b^2 = 179.56$

$\sqrt{b^2} = \sqrt{143.56}$

$b = 12.0\,cm$

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

$$V = \frac{\pi (6)^2 (12)}{3}$$

$$= \frac{1357.17}{3}$$

$$V = 452.4 cm^3$$