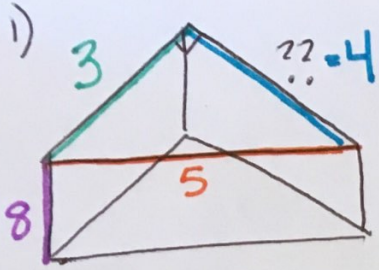
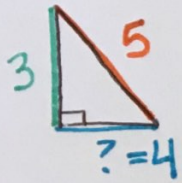
1)




## Volume

V = Area of Base × Height

$A = \frac{1}{2}bh = \frac{1}{2}(3)(4) = 12(\frac{1}{2}) = 6 \text{ units}^2$




$5^2 = 3^2 + b^2$

$25 - 9 = b^2$

$\pm\sqrt{16} = \sqrt{b^2}$

$b = 4$

$V = 6(8)$

$V = 48 \text{ units}^3$

## Surface Area

$A = \frac{1}{2}bh = 6$

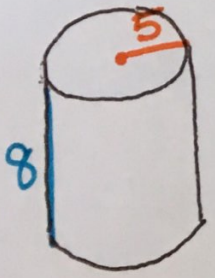
$A = lw = (5)(8) = 40$

$A = (3)(8) = 24$

$A = (4)(8) = 32$

$SA = 2(6) + 40 + 24 + 32 = 108 \text{ units}^2$

b)



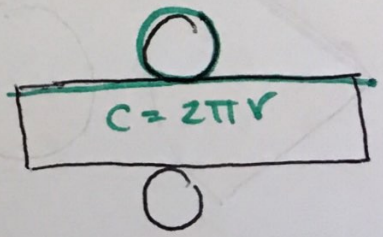

## Volume

$A = \pi r^2 = \pi(5)^2 = 78.5$

$V = (78.5)8 = 628 \text{ inches}^3$

## Surface Area

$A = \pi r^2 = 78.5$



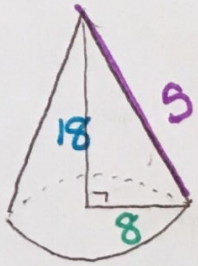

$A = lw = 8(2\pi(5))$

$= 251.2$

$SA = 2(78.5) + 251.2$

$= 408.4 \text{ units}^2$

c)



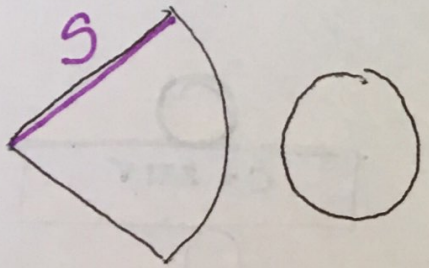

## Volume

$A = \pi r^2 = \pi(8^2) = 200.96$

$H = 18$

$V = \frac{1}{3}(200.96)(18) = 1205.76 \text{ inches}^3$

## Surface Area



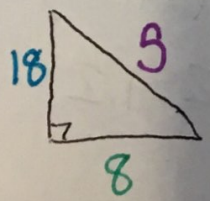

$A = 200.96$

$A = \pi(19.70)(8) = 494.9$

$SA = 200.96 + 494.9$

$= 695.9 \text{ inches}^2$

$A = \pi r S$




$18^2 + 8^2 = S^2$

$\sqrt{388} = \sqrt{S^2}$

$S = 19.70$