

37

SA = ?

V = ?

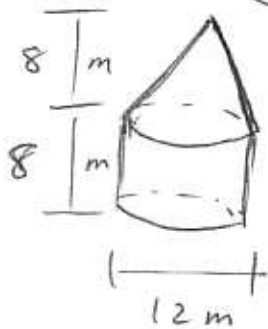


SA = 4πr<sup>2</sup>

SA = 4π(6m)<sup>2</sup> = 144π m<sup>2</sup>

V =  $\frac{4\pi r^3}{3}$  =  $\frac{4\pi(6m)^3}{3}$  = 288π m<sup>3</sup>

38



SA = ?

V = ?

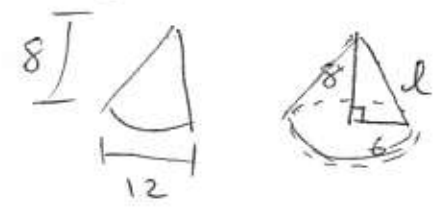
SA = LA<sub>cone</sub> + LA<sub>cylinder</sub> + 1 Base of cylinder

What you can paint on the outside



= πrl + (2πr)h + πr<sup>2</sup>

For cone l = ?



r = 6m for cone (half of 12)

l = √(6<sup>2</sup> + 8<sup>2</sup>) = 10m for cone

h = 8m for cylinder

r = 6m for cylinder

96  
36  
132  
60  
192

SA = π(6m)(10m) + 2π(6m)(8m) + π(6m)<sup>2</sup>  
SA = 60πm<sup>2</sup> + 96πm<sup>2</sup> + 36πm<sup>2</sup>  
SA = 192π m<sup>2</sup>