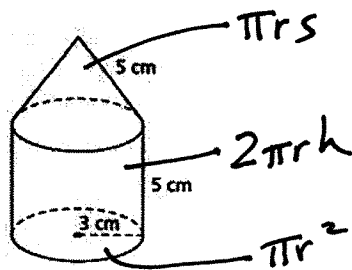


Determine the surface area of each composite object to the nearest square unit.

a) right cylinder and right cone



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

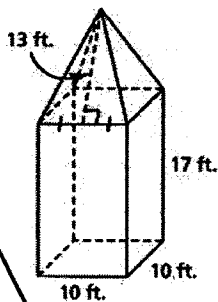
$$SA = \pi(3)(5) + 2\pi(3)(5) + \pi(3)^2$$

$$SA = 169.64$$

or

$$SA = 170 \text{ cm}^2$$

b) right square prism and right square pyramid



$$SA = \text{square base} = 100$$

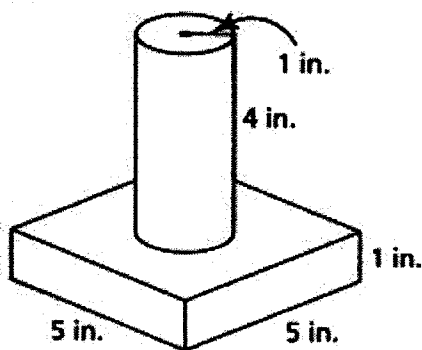
$$+ \text{Rect sides} = 4(170)$$

$$+ \text{Triang. sides} = 4\left(\frac{13 \times 10}{2}\right)$$

$$SA = 100 + 680 + 260$$

$$SA = 1040 \text{ ft}^2$$

c) right square prism and right cylinder

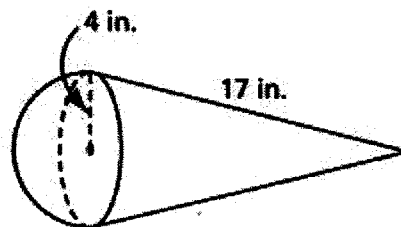


$$SA = 25 + 25 + 5 + 5 + 5 + 5 + 2\pi r h$$

$$+ 2\pi(1)(4)$$

$$SA = 70 + 8\pi = 95 \text{ in}^2$$

d) right cone and hemisphere



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

$$= 2\pi(4)^2 + \pi(4)(17)$$

$$SA = 314 \text{ in}^2$$