

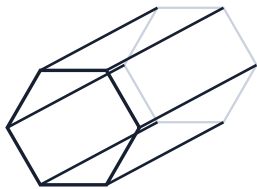
Surface Area of Solids

Find the total surface area. sqrt(n) means the square root of n. Use calculator pi, retain intermediate precision, and round the final answer to the nearest hundredth.

1. Right prism with a regular hexagonal base: Find the total surface area.

Given: regular base side = 8 ft; base apothem = $8\sqrt{3}/2$ ft; prism height = 15 ft

Formula and work:



perp. H

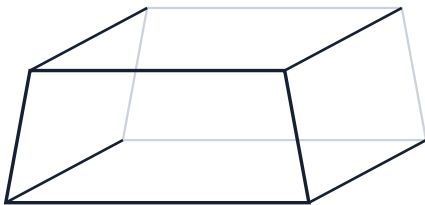
base s

base ap.
not to scale

2. Right square prism: Find the total surface area.

Given: base side = 5 yd; prism height = 7 yd

Formula and work:



perp. H

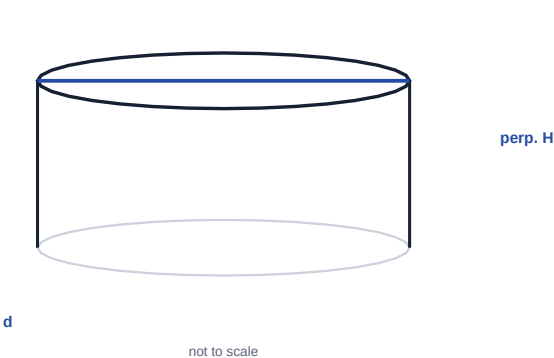
base s

not to scale

Surface Area of Solids

Find the total surface area. sqrt(n) means the square root of n. Use calculator pi, retain intermediate precision, and round the final answer to the nearest hundredth.

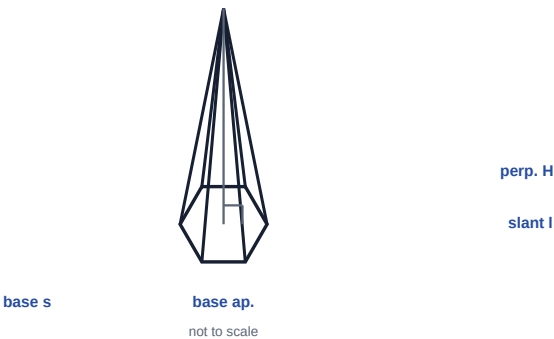
3. Right cylinder: Find the total surface area.



Given: diameter = 20 in; cylinder height = 9 in

Formula and work:

4. Right pyramid with a regular hexagonal base: Find the total surface area.



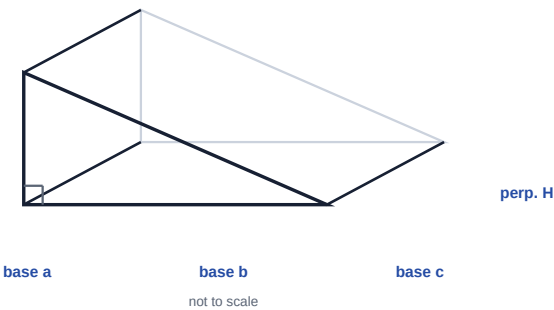
Given: regular base side = 7 mm; base apothem = $7\sqrt{3}/2$ mm; perpendicular height = 18 mm; face slant height = $\sqrt{(18)^2 + (7\sqrt{3}/2)^2}$ mm

Formula and work:

Surface Area of Solids

Find the total surface area. sqrt(n) means the square root of n. Use calculator pi, retain intermediate precision, and round the final answer to the nearest hundredth.

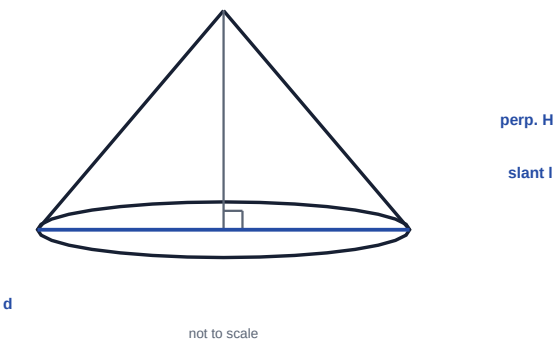
5. Right prism with a right-triangle base: Find the total surface area.



Given: base leg = 8 cm; base height = 15 cm; base hypotenuse = 17 cm; prism length = 11 cm

Formula and work:

6. Right cone: Find the total surface area.



Given: diameter = 8 ft; perpendicular height = 14 ft; slant height = sqrt((8/2)^2+(14)^2) ft

Formula and work:
