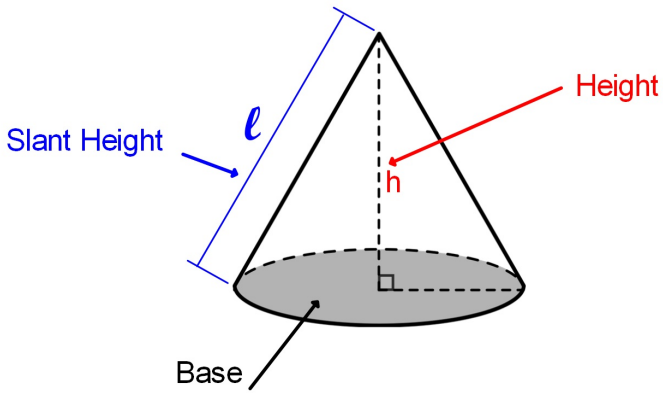
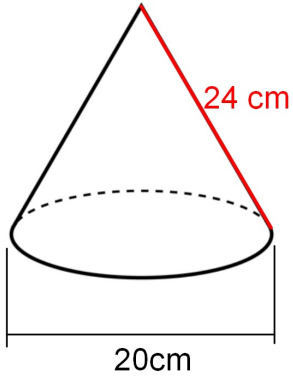
Cone:

Like a Pyramid but the Base is a Circle



Find the SA of this cone. Leave your answer in terms of π

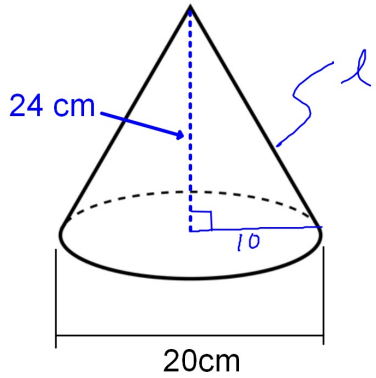


$SA = \pi 16^2 + \pi 16 \cdot 24$

$100 + 240$

340π

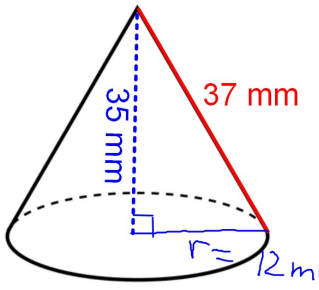
Find the SA of this cone. Leave your answer in terms of π



$\pi(10)^2 + \pi(10)(26)$

360π

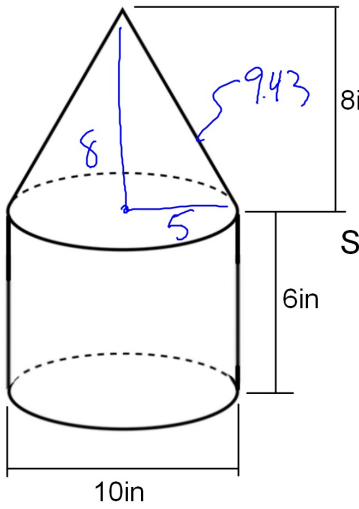
Find the SA of this cone. Leave your answer in terms of π



$SA = \pi(12)^2 + \pi(12)(37)$

$588\pi \text{ mm}^2$

Find the SA of this figure to the nearest hundredth.

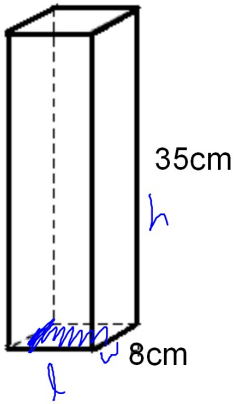


SA = LA of a Cone
+ LA of a Cylinder
+ Circle

$\pi r \ell$
$2\pi r h$
πr^2
$\pi(5)(9.43) + \pi(5)(6) + \pi(5)^2$
520.91

Sec 11-4: Volumes of Prisms and Cylinders

Find the volume of this Square Prism:

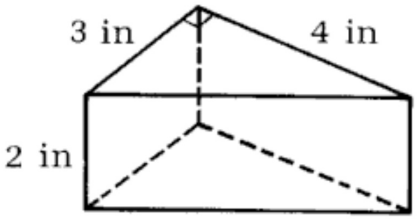


Volume of a Box = $\ell \cdot w \cdot h = B \cdot h$

Area of the Base

Volume of a Prism = B·h

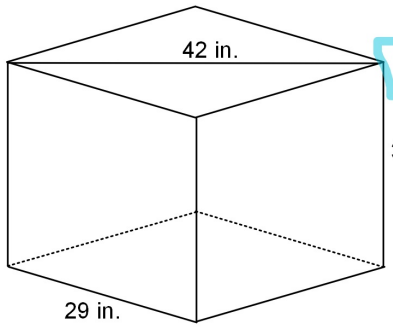
Find the volume of this Right Triangular Prism.



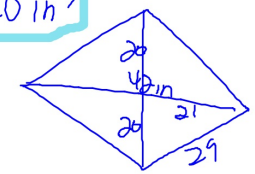
$V = Bh = (6in^2)(2in)$
12 in³

$\frac{1}{2}bh = \frac{1}{2}(3)(4) = 6in^2$

Find the volume of this Rhomboidal Prism.



$V = (840in^2)(30in)$
25201n³



$\frac{1}{2}(d)(d)$
$B = \frac{1}{2}(42)(40) = 840 in^2$

Volume of a Prism: $V = Bh$

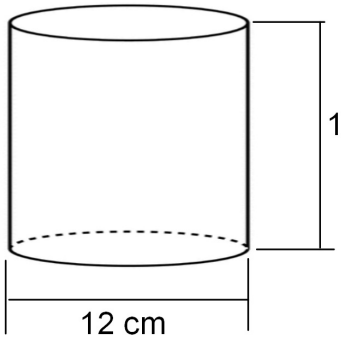
Volume of a Cylinder: $V = Bh$

Base is a circle

Area of a circle = πr^2

$$V = \pi r^2 h$$

Find the volume of this cylinder. Give your answer in terms of π.

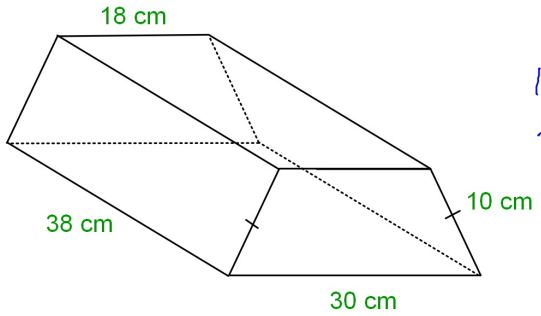


$V = \pi r^2 \cdot h$

$\pi(6)^2 \cdot 14$

$V = 504\pi \text{ cm}^3$

Find the volume of this solid.



30

$= \frac{1}{2}(b+b)h$

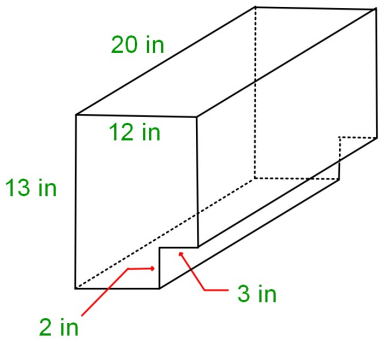
$\frac{1}{2}(18+30)8$

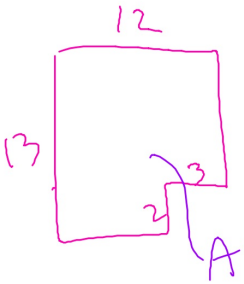
$V = Bh$

$= (192 \text{ cm}^2)(38 \text{ cm}) = 7296 \text{ cm}^3$

$B = 192$

Find the volume of this solid.
All angles are right angles.



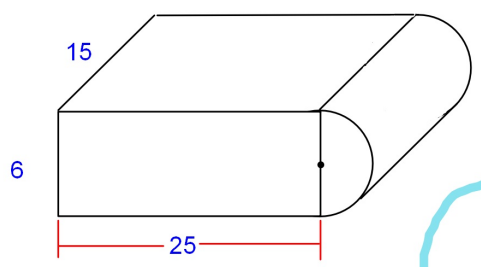


$A = 150$

$V = Bh = (150)(20)$

3000 in^3

Find the volume of this solid to the nearest hundredth.



Box + ½ cyl

$(25)(6)(15) + \pi(3)^2 5$

2674.12