Unit 7 Notes - Perimeter, Area, Surface Area, Volume

Ex. 1 Find the area of the figure.

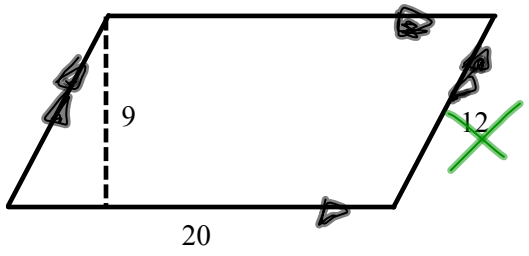
$A = L \cdot w$

$A = 8 \cdot 14$

$= 112$

Ex. 2 Find the area of the figure.

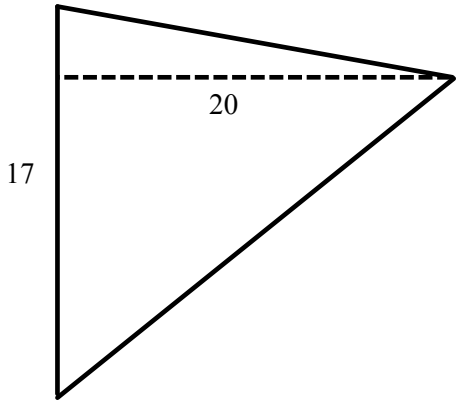
$A = b \cdot h$



$A = 9 \cdot 20$

$A = 180$

Ex. 3 Find the area of the figure.

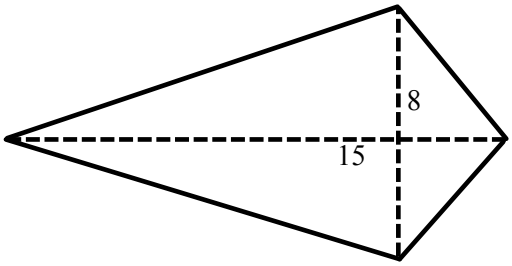


$A = \frac{b \cdot h}{2}$

$= \frac{20 \cdot 17}{2}$

$= 170$

Ex. 4 Find the area of the figure.

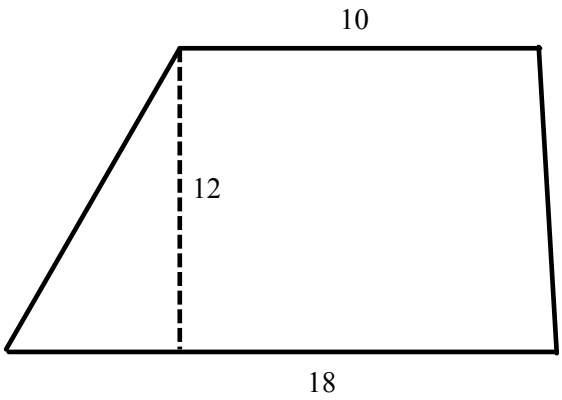


$A = \frac{d_1 \cdot d_2}{2}$

$= \frac{8 \cdot 15}{2}$

$= 60$

Ex. 5 Find the area of the figure.

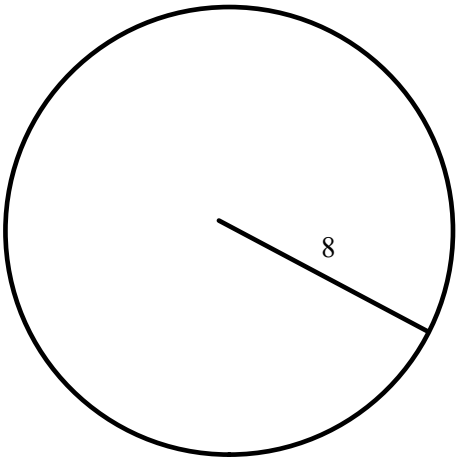


$A = \left(\frac{b_1 + b_2}{2}\right) \cdot h$

$A = 14 \cdot 12$

$A = 168$

Ex. 6 Find the area and circumference.



$A = \pi r^2$

$= \pi \cdot 8^2$

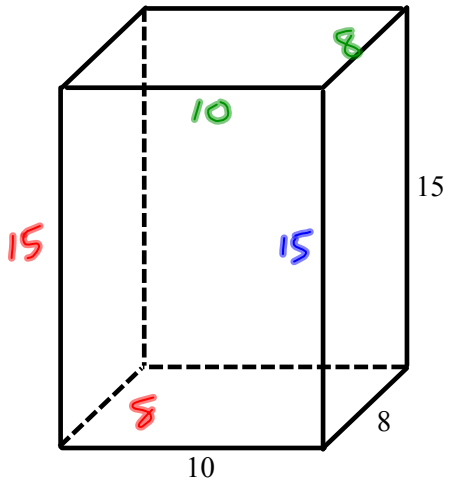
$= 64\pi \approx 201.06$

$C = \pi \cdot d$

$= \pi \cdot 16 = 16\pi$

$C \approx 50.3$

Ex. 7 Find the surface area. Assume all angles measure 90°.



Front = $10 \cdot 15 = 150$

Back = 150

Top = $10 \cdot 8 = 80$

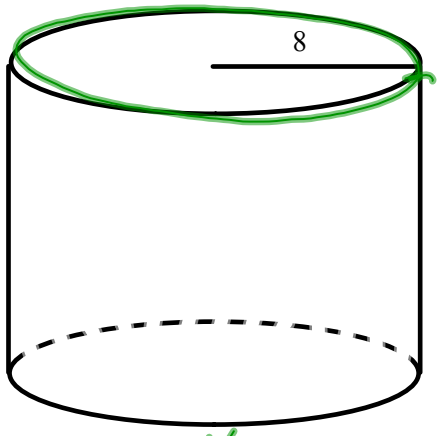
Bottom = 80

Left = $15 \cdot 8 = 120$

Right = 120

Surface Area = 700

Ex. 8 Find the surface area. Assume all angles measure 90°.



Top = $\pi r^2 = \pi \cdot 8^2$

$= 201.06$

Bottom = 201.06

Side = $16 \cdot \pi \cdot 11$

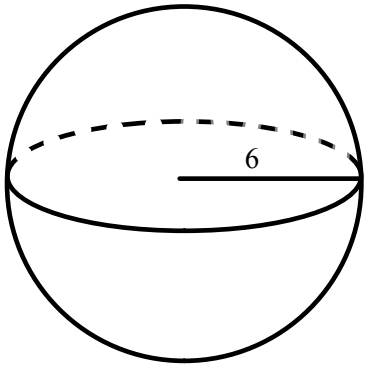
$= 552.92$

$C = \pi \cdot 16$

11

Surface Area = 955

Ex. 9 Find the surface area.

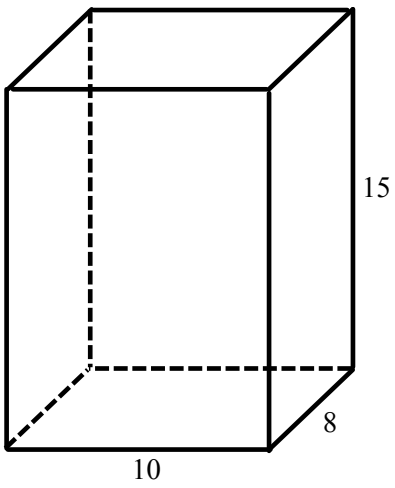


$S.A. = 4\pi r^2$

$= 4 \cdot \pi \cdot 6^2$

$= 144\pi$

Ex. 10 Find the volume. Assume all angles measure 90°.

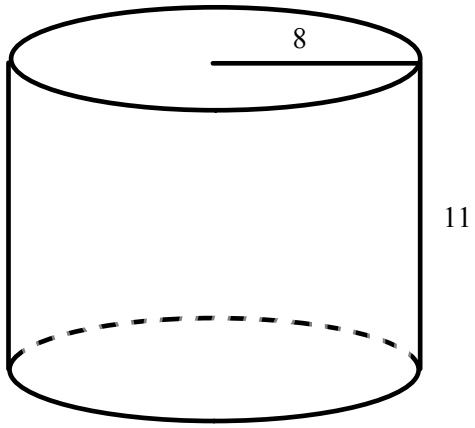


$V = L \cdot h \cdot w$

$V = 10 \cdot 8 \cdot 15$

$= 1200$

Ex. 11 Find the volume. Assume all angles measure 90°.

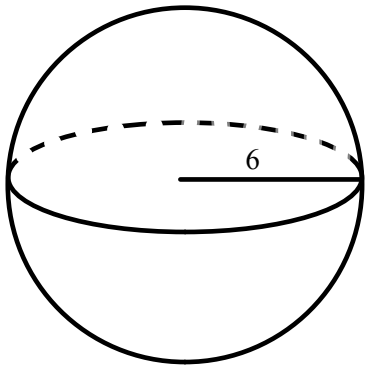


$V = \pi r^2 \cdot h$

$= \pi \cdot 8^2 \cdot 11$

$= 704\pi$

Ex. 12 Find the volume.



$V = \frac{4}{3}\pi r^3$

$= \frac{4}{3} \cdot \pi \cdot 6^3$

$= 288\pi$