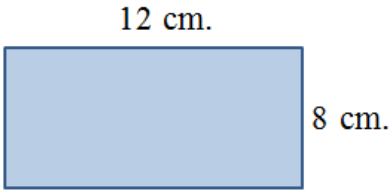
I can calculate the area and perimeter of basic shapes and composite shapes

Basic Area and Perimeter



Area

F:

S:

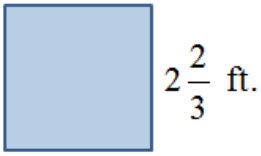
S:

Perimeter

F:

S:

S:



Area

F:

S:

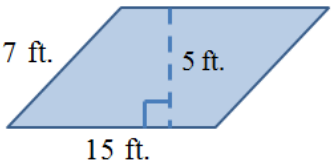
S:

Perimeter

F:

S:

S:



Area

F:

S:

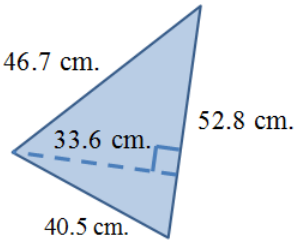
S:

Perimeter

F:

S:

S:



Area

F:

S:

S:

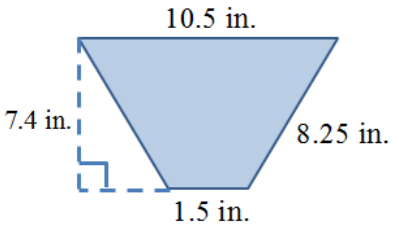
Perimeter

F:

S:

S:

Isosceles Trapezoid



Area

F:

S:

S:

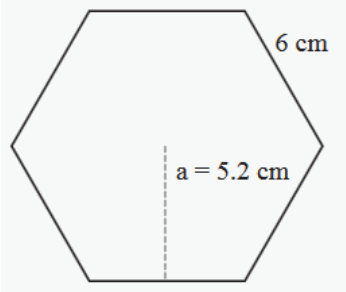
Perimeter

F:

S:

S:

Regular Hexagon



Area

F:

S:

S:

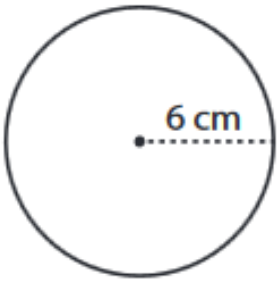
Perimeter

F:

S:

S:

Circles



Area <u>In Terms of π</u>

F:

S:

S:

Circumference

F:

S:

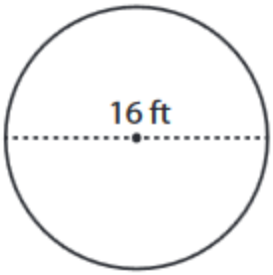
S:

Area <u>To the Nearest Hundredth</u>

S:

Area <u>In Terms of π</u>

Circumference



F:

F:

S:

S:

S:

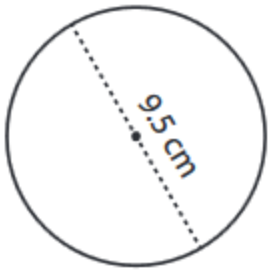
S:

Area <u>To the Nearest Hundredth</u>

S:

Area <u>In Terms of π</u>

Circumference



F:

F:

S:

S:

S:

S:

Area <u>To the Nearest Hundredth</u>

S:

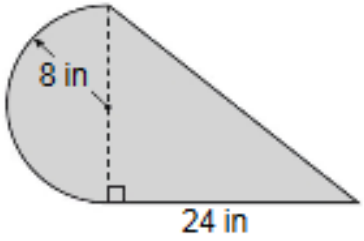
Find the radius of a circle if the **Area** is 49π ft^2.

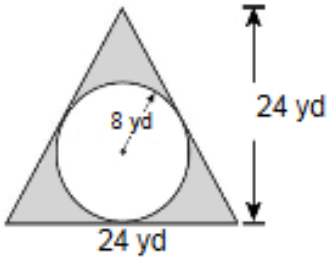
Find the diameter of a circle if the **Area** is 81π cm^2

Find the radius of a circle if the **Circumference** is 120π in^{2}.

Find the diameter of a circle if the **Circumference** is 34π yd^{2}

Composite Shapes

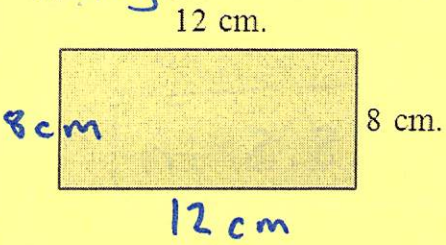




I can calculate the area and perimeter of basic shapes and composite shapes

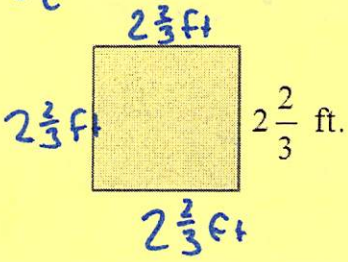
Basic Area and Perimeter

Rectangle

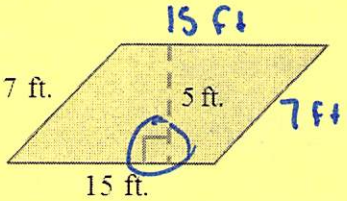


	Area	Perimeter
F:	$A = b \cdot h$	P = Add 4 sides
S:	$A = 12 \cdot 8$	$P = 12 + 8 + 12 + 8$
S:	$A = 96\ cm^2$	$P = 40\ cm$

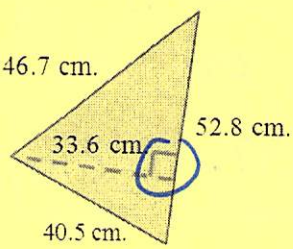
Square



	Area	Perimeter
F:	$A = b \cdot h$	P = Add 4 Sides
S:	$A = 2\frac{2}{3} \cdot 2\frac{2}{3}$	$P = 2\frac{2}{3} + 2\frac{2}{3} + 2\frac{2}{3} + 2\frac{2}{3}$
S:	$A = \frac{8}{3} \cdot \frac{8}{3}$	$P = \frac{8}{3} + \frac{8}{3} + \frac{8}{3} + \frac{8}{3}$
	$A = \frac{64}{9} = 7\frac{1}{9}\ ft^2$	$P = \frac{32}{3} = 10\frac{2}{3}\ ft$

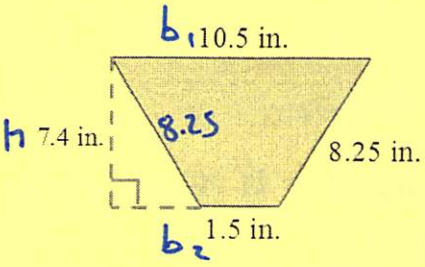


	Area	Perimeter
F:	$A = b \cdot h$	P = Add 4 Sides
S:	$A = 15 \cdot 5$	$P = 15 + 7 + 15 + 7$
S:	$A = 75\ ft^2$	$P = 44\ ft$



	Area	Perimeter
F:	$A = \frac{b \cdot h}{2}$	P = Add 3 sides
S:	$A = \frac{52.8 \cdot 33.6}{2}$	$P = 46.7 + 52.8 + 40.5$
S:	$A = 887.04\ cm^2$	$P = 140\ cm$

Isosceles Trapezoid



Area

F: $A = \frac{h \cdot (b_1 + b_2)}{2}$

S: $A = \frac{7.4(10.5 + 1.5)}{2}$

S: $A = 44.4 \text{ in}^2$

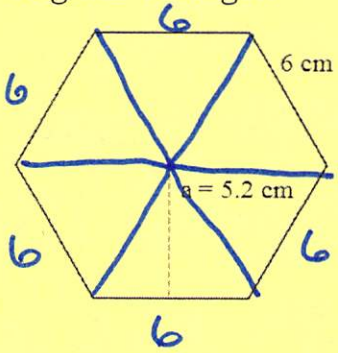
Perimeter

F: P = Add 4 sides

S: $P = 10.5 + 8.25 + 1.5 + 8.25$

S: $P = 28.5 \text{ in}$

Regular Hexagon



Area

F: $A = \frac{b \cdot h}{2} \times 6\,\Delta$'s

S: $A = \frac{6 \cdot 5.2}{2} \times 6\,\Delta$'s

S: $A = 15.6 \times 6\,\Delta$'s

$A = 93.6 \text{ cm}^2$

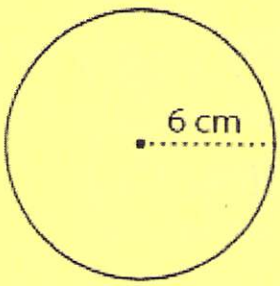
Perimeter

F: $P = 6 \cdot$ sides

S: $P = 6 \cdot 6$

S: $P = 36 \text{ cm}$

Circles



$r = 6 \text{ cm}$

$d = 12 \text{ cm}$

Area In Terms of π

F: $A = \pi \cdot r^2$

$A = \pi \cdot 6^2$

S: $A = 36\pi \text{ cm}^2$

Area To the Nearest Hundredth

S: 113.10 cm^2

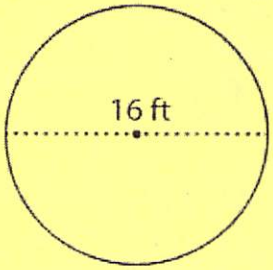
Circumference

F: $C = 2 \cdot \pi \cdot r$

$C = \pi \cdot d$

S: $C = 2 \cdot \pi \cdot 6$

S: $C = 12\pi$ or $C = 37.70 \text{ cm}$



$r = 8$ ft

$d = 16$ ft

Area In Terms of π

F: $A = \pi \cdot r^2$

S: $A = \pi \cdot 8^2$

S: $A = 64\pi$ ft^2

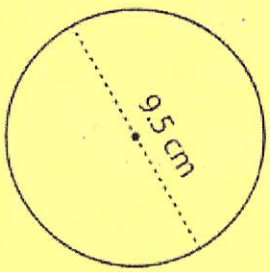
Circumference

F: $C = \pi \cdot d$

S: $C = 16\pi$ ft or $C = 50.27$ ft

Area To the Nearest Hundredth

S: $A = 201.06$ ft^2



$r = 4.75$ cm

$d = 9.5$ cm

Area In Terms of π

F: $A = \pi \cdot r^2$

S: $A = \pi (4.75)^2$

S: $A = 22.5625\pi$ cm^2

Circumference

F: $C = \pi \cdot d$

S: $C = 9.5\pi$ cm or $C = 29.85$ cm

Area To the Nearest Hundredth

S: $A = 70.88$ cm^2

Find the radius of a circle if the **Area** is 49π ft^2. $A = \pi r^2$

$49\pi = \pi r^2$

7 ft $= r$

Find the diameter of a circle if the **Area** is 81π cm^2

$A = \pi r^2$

$81\pi = \pi r^2$

9 ft $= r \rightarrow d = 18$ ft

Find the radius of a circle if the **Circumference** is 120π in^2.

$C = 2 \cdot \pi \cdot r$

$\frac{120\pi}{2} = \frac{2 \cdot \pi \cdot r}{2}$

60 in = r

Find the diameter of a circle if the **Circumference** is 34π yd^2

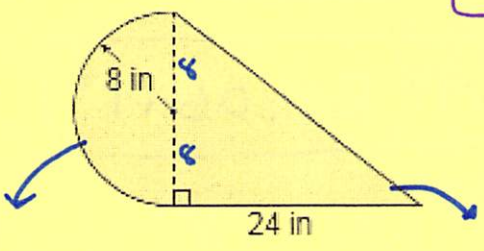
$C = 2 \cdot \pi \cdot r$

$\frac{34\pi}{2} = \frac{2 \cdot \pi \cdot r}{2}$

17 = r

34 yd = d

Composite Shapes



Semi-Circle

$A = \pi r^2 \div 2$

$A = \pi \cdot 8^2 \div 2$

$A = \pi \cdot 64 \div 2$

$A = 32\pi$

$= 100.53$ in^2

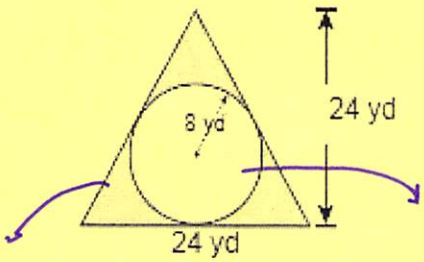
$A = \frac{b \cdot h}{2}$

$A = \frac{24 \cdot 16}{2}$

$A = 192$ in^2

Total Area

292.53 in^2



Shaded Area = $\triangle$ − ○

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

$A = \frac{24 \cdot 24}{2}$

$A = 288$ yd^2

$A = \pi r^2$

$A = \pi \cdot 8^2$

$A = 201.06$

Shaded Area

86.94 yd^2