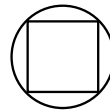


# Inscribed Figures

An inscribed figure is a shape drawn inside another figure.



Practice finding the area of the shaded portion of each example with your teacher:

a)

Area of the rectangle:  $40\text{cm}^2$

Area of the square:  $9\text{cm}^2$

Area of the shaded region:  $31\text{cm}^2$

b)

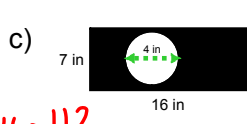
The triangle has a base of 3 yd and a height of 2 yd.

Area of square:  $36\text{yd}^2$

Area of triangle:  $3\text{yd}^2$

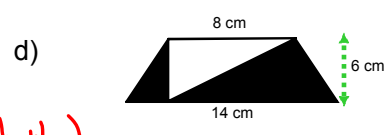
Area of shaded region:  $33\text{yd}^2$

$\frac{3 \times 2}{2}$



Area of rectangle:  $112 \text{ in}^2$   
 Area of circle:  $12.56 \text{ in}^2$   
 Area of shaded region:  $99.44 \text{ in}^2$

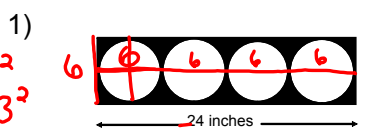
$7 \times 16 = 112$   
 $\pi r^2$   
 $\pi 2^2$   
 $\pi 4$



$\frac{h(b_1 + b_2)}{2}$

Area of trapezoid:  $66 \text{ cm}^2$   
 Area of triangle:  $24 \text{ cm}^2$   
 Area of shaded region:  $42 \text{ cm}^2$

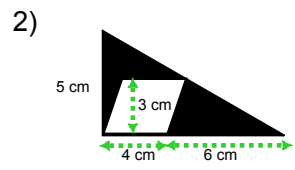
Now you try a few on your own:



Area of rectangle:  $144 \text{ in}^2$   
 Area of circles:  $113.04 \text{ in}^2$   
 Area of shaded region: \_\_\_\_\_

$\pi r^2$   
 $\pi 3^2$   
 $\pi 9$   
 $28.26 \times 4 =$

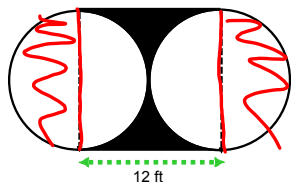
$\sim 30.96 \text{ in}^2$



Area of triangle:  $25 \text{ cm}^2$   
 Area of parallelogram:  $12 \text{ cm}^2$   
 Area of shaded region:  $13 \text{ cm}^2$

Who can figure this one out?

Bonus:



Area of square: 144

Area of semi circle: 113.1

Area of shaded region: 509