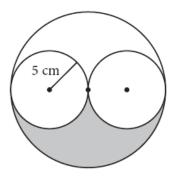
Name: \_\_\_\_\_

## Circumference and Area of a Circle

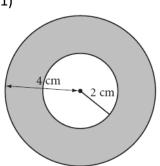
1) Find the area of the shaded region. Write your answers in terms of  $\pi$ . The three circles are tangent.



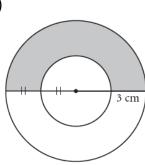
2) Find the area of the shaded region. Write your answers in

terms of  $\pi$ 

1)



2)

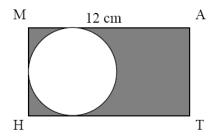


3) Consider the circle inscribed in the square TASK shown below.

T
op
A
6 cm
S

- 1) Find the area of the square.
- 2) Find the exact area of the circle in terms of  $\pi$ .
- 3) Express the shaded area in terms of  $\pi$ .
- 4) Express the area of the shaded region to the nearest hundredth.

4) In the following diagram MATH is a rectangle with an inscribed circle. The circle has a diameter of 8 centimeters and the rectangle has a height of 12 centimeters (as shown).



- 1) Find the exact area of the shaded region.
- 2) Find the area of the shaded region to the nearest *tenth*.
- 5) Find the area of the shaded region below in terms of  $\pi$  if QP = 8 ft and QS = 12 ft.

