

# Area of Circles Guide Notes

## Circle

A circle is a boundary of a round region in a plane.

## Area of a Circle

The area of a circle is the product of the two constant  $\pi$  and the square of the length of the radius of the circle.

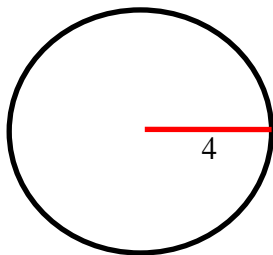
$$A = \pi r^2$$

The area of a circle, with the diameter of  $d$ , is

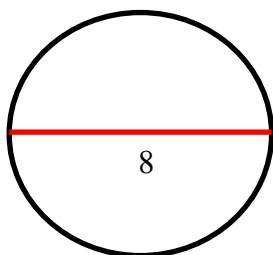
$$A = \frac{\pi d^2}{4}$$

**Sample Problem 1:** Find the area of the following circle.

1.



2.



# Area of Circles Guide Notes

**Sample Problem 2:** Solve Problems involving the area of a circle.

4. The area of the circle G is  $81\pi$ . Find its diameter.

5. Find the radius of a circle F if its area is  $169\pi\text{cm}^2$ .

6. Find the area of a circle with a diameter of 21m.