Finding the Area of a Circle from its Radius or Diameter

Find the [area of the circle](#) in each of the following problems. Make sure to find the radius when the diameter of the circle is given.

1. Find the area of a circle whose radius is 13.6 inches.

Solution: Given the radius "r" = 13.6 in

$$Area\ of\ the\ circle\ A = \pi r^2$$

Substitute $\pi = 3.14\ and\ r = 13.6$

$$A = 3.14\ x\ 13.6^2$$

$$A = 3.14\ x\ 184.96$$

$$A = 580.77\ in^2$$

2. A circle has its diameter equals to 6.5 yards. Find its area.

Solution: Given the diameter d = 6.5 yards

Radius of circle r = d/2 = 6.5/2 = 3.25 yards

$$Area\ of\ the\ circle\ A = \pi r^2$$
Now, you can complete the rest yourself.

3. Find the area of a circle whose diameter is equal to 16.0 cm.

4. A circular flower bed has its radius equal to 15 feet. Find its area.

Answers: 2. 33.17,   3. 200.96,   4. 706.5