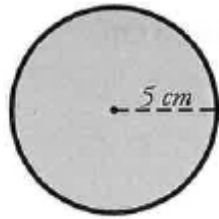# Area of a Circle
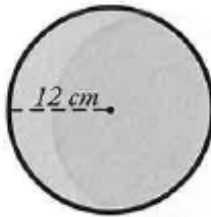
To find the area of a circle, use the formula **pi x radius² = area**.
This formula is often written as $A = \pi r^2$.

The circle pictured here has a radius of 5 cm.
$r = 5$ cm
$\pi \approx 3.14$
$A = 3.14 \times (5\text{ cm} \times 5\text{ cm})$
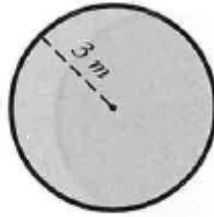$A = 3.14 \times 25\text{ cm}^2$
$A = 78.50\text{ cm}^2$

Find the area of each circle. Use 3.14 for pi.
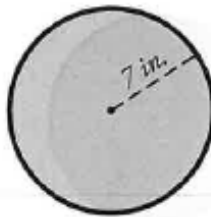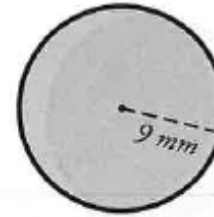
a. 12 cm

_____

b. 3 m
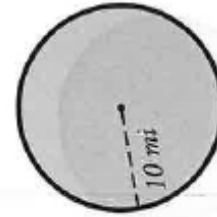
_____

c. 6 km

_____

d. 7 in.

_____

e. 9 mm

_____

f. 10 mi

_____

g. Kaylee and Rory have a circular swimming pool. The pool has a cover that fits snuggly over the top of it. If the radius of the pool is 11 ft, what is the surface area of the cover?
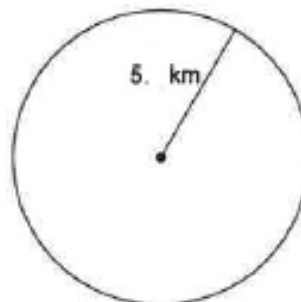
_____

Finding the Area of a Circle
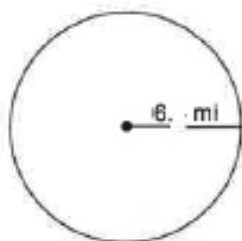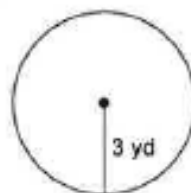
Find the area of each. Round to the nearest tenth.

1)

12 mi

2)

5. km

3)

6. mi

4)

3 yd

5)

5 ft

6)

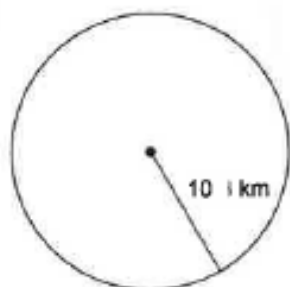8.6 in

7)

10 km

8)

8 cm

9)

7 ft

10)

6 km

11)

20 m

12)

6 m

13)

22 yd

14)

18 ft

15)

16 mi

16)

13. mi

17)

22 yd

18)

6 m

19)

6. cm

20)

4 in

Example :

8 ft
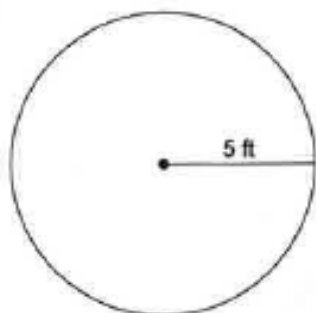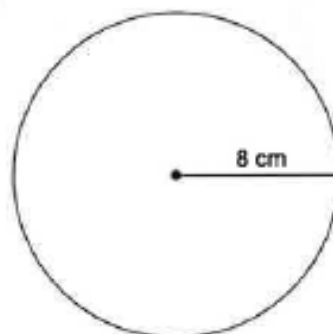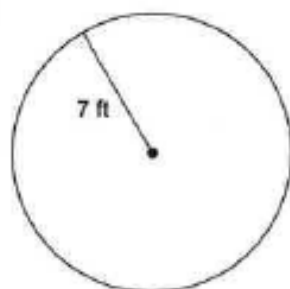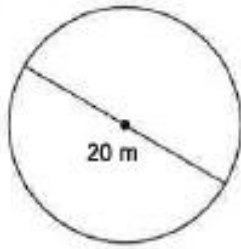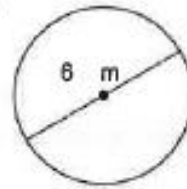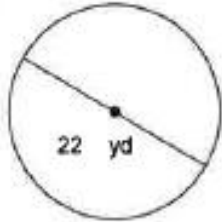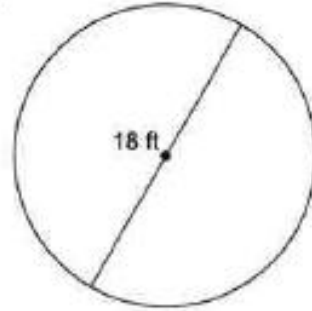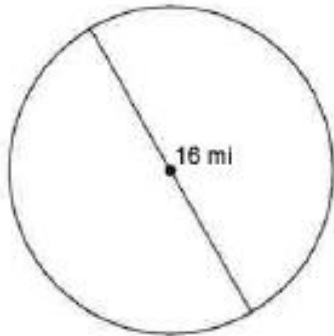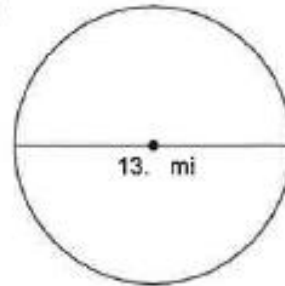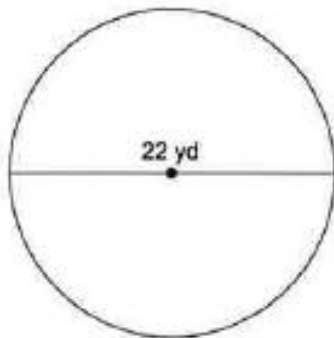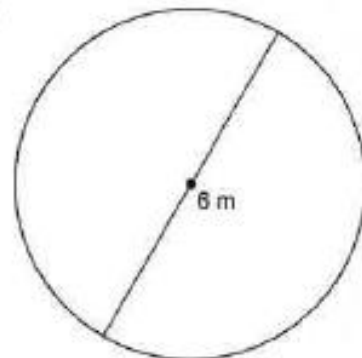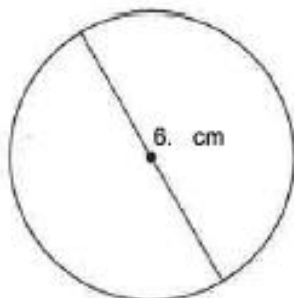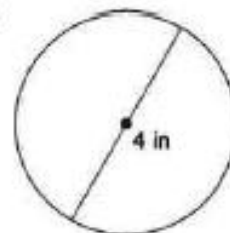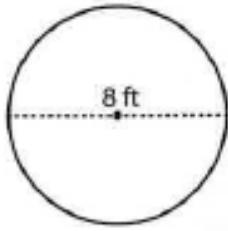
Area of a circle = πr²

Diameter = 8 ft

Radius (r) = 4 ft

Area = πr²

= π x 4 x 4

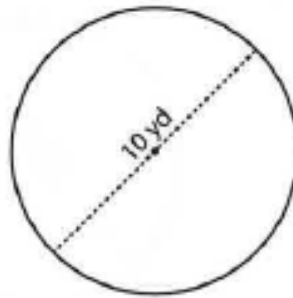Area = **16π ft²**

Find the exact area of each circle.

1)

16 in

Area = :..............:

2)

10 yd

Area = :..............:

3)

36 ft

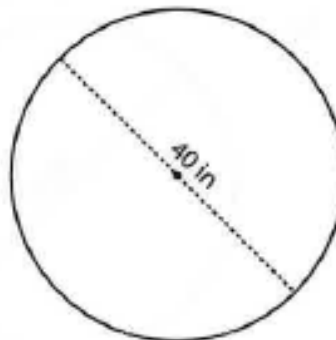Area = :..............:

4)

22 ft

Area = :..............:

5)

40 in

Area = :..............:

6)

6 yd

Area = :..............:

7)

14 in

Area = :..............:

8)

20 yd

Area = :..............:

9)

12 ft

Area = :..............: