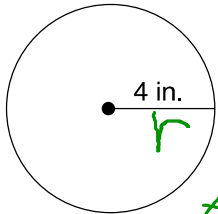


**LESSON** **Reteach**  
**9-5** **Area of Circles**

The formula  $A = \pi r^2$  is used to find the area of a circle. Since the value of  $\pi$  is about 3.14, you can use the formula  $A \approx 3.14 \cdot r \cdot r$  to estimate the area of a circle. Remember that area is expressed in square units.



50.2654  
 50.3  
 $A \approx$

The radius of the circle is 4 in.

$A \approx 3.14 \cdot r \cdot r$

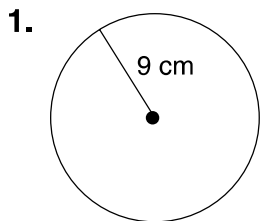
$A \approx 3.14 \cdot 4 \cdot 4$

$A \approx 50.24$

$A = \pi r^2$

The area of the circle is 50.2 in<sup>2</sup> to the nearest tenth.

Find the area of each circle to the nearest tenth. Use 3.14 for  $\pi$ .



$C = \pi d$   
 $3.14 \cdot 18$

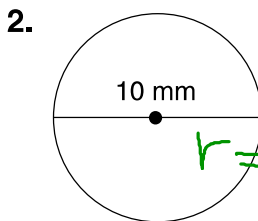
The radius is 9 cm.

$A = \pi r^2$

$A \approx 3.14 \cdot 9 \cdot 9$

$A \approx 254.3$

The area is 254.3 cm<sup>2</sup> to the nearest tenth.



$C = \pi d$

$r = 5$

3.14

The diameter is 10 mm.

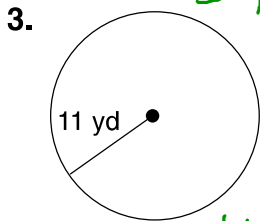
The radius is 5 mm.

$A = \pi r^2$

$A \approx 3.14 \cdot 5 \cdot 5$

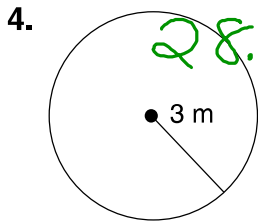
$A \approx 78.5 \text{ mm}^2$

The area is \_\_\_\_\_ m<sup>2</sup> to the nearest tenth.



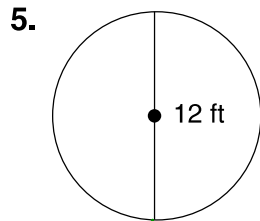
379.9  
 yd<sup>2</sup>

$3.14 \cdot 11^2$



28.26  
 m<sup>2</sup>

$3.14 \cdot 3 \cdot 3 =$



113.04  
 ft<sup>2</sup>

$3.14 \cdot 6 \cdot 6 =$

6. What is the area of a circle with radius 13 yd? Round your answer to the nearest tenth.

$13 \cdot 13 \cdot 3.14 = 530.66 \text{ yd}^2$