


Name _____ Date _____ Class _____


9-5 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 π 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.


The radius of the circle is 4 in.
 $A \approx 3.14 \cdot r \cdot r$
 $A \approx 3.14 \cdot 4 \cdot 4$
 $A \approx 50.24$
 The area of the circle is 50.2 in² to the nearest tenth.


Find the area of each circle to the nearest tenth. Use 3.14 for π .

1.  The radius is 9 cm.
 $A = \pi r^2$
 $A \approx 3.14 \cdot 9 \cdot 9$
 $A \approx 254.34$
 The area is 254.3 cm² to the nearest tenth.

2.  The diameter is 10 mm.
 The radius is 5 mm.
 $A = \pi r^2$
 $A \approx 3.14 \cdot 5 \cdot 5$
 $A \approx 78.5$
 The area is 78.5 mm² to the nearest tenth.

3.  The diameter is 11 yd.
 The radius is 5.5 yd.
 $A = \pi r^2$
 $A \approx 3.14 \cdot 5.5 \cdot 5.5$
 $A \approx 95.03$
 The area is 95.0 yd² to the nearest tenth.

4.  The radius is 3 m.
 $A = \pi r^2$
 $A \approx 3.14 \cdot 3 \cdot 3$
 $A \approx 28.26$
 The area is 28.3 m² to the nearest tenth.

5.  The diameter is 6 ft.
 The radius is 3 ft.
 $A = \pi r^2$
 $A \approx 3.14 \cdot 3 \cdot 3$
 $A \approx 28.26$
 The area is 28.3 ft² to the nearest tenth.

6. What is the area of a circle with radius 13 yd?
 Round your answer to the nearest tenth.
 $A = \pi r^2$
 $A \approx 3.14 \cdot 13 \cdot 13$
 $A \approx 530.74$
 The area is 530.7 yd² to the nearest tenth.

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Circumference: $3.14(\text{Diameter})$
 OR $3.14(2)(\text{radius})$

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