Test Review - Circles: Area and Circumference

Name: Key Date: _____

Formulas: $C = 2\pi r$ $C = \pi d$ $A = \pi r^2$

1. An apple pie has a circumference of 30 inches. Which expression can be used to find the *approximate* radius of the apple pie?

   a) $30 \div 2$ b) $30 \cdot 2$ c) $30 \div 2\pi$ d) $30 \cdot 2\pi$

   "about 6"

2. The circumference of a can of soup is about 12 inches. What is the *approximate* diameter of the can?

   a) 4 in b) 3 in. c) 2 in. d) 6 in.

3. The rim of Jan's cereal bowl has a circumference of 12 inches. Which of the following statements is NOT true about Jan's cereal bowl?

   a) The diameter of the cereal bowl is about 4 inches.

   b) The radius of the cereal bowl is about 2 inches.

   c) The radius of the cereal bowl is about 4 inches.

   d) The radius of the cereal bowl is half its diameter.

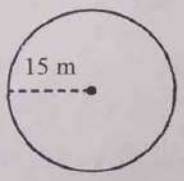
4. If a circle has a diameter of 5 centimeters, what is its circumference? Use 3.14 for π.

   15.7 cm

5. **Estimate first. Then find the actual circumference of the circle using 3.14 for π. Round to the nearest tenth, if necessary.**

   Estimated Circumference: 90 m

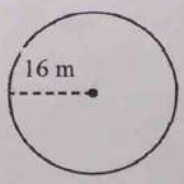
   Actual Circumference: 94.2 m



6. The figure below shows a top view of a circular track. How far would a runner go if they went around the entire track one time? Use 3.14 for π.

   A 50.24 m C 100.48 m

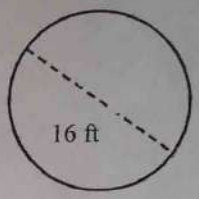
   B 96 m D 803.84 m



7. If a circle has a diameter of 14 centimeters, what is its area? Use $\frac{22}{7}$ for π.

154 cm^2

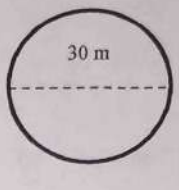
8. Find the area of the circle shown to the right in terms of π.



a) 256π ft^2 b) 16π ft^2

c) 32π ft^2 d) 64π ft^2

9. Which formula could be used to find the area of the circle shown to the right?



a) $A = \pi(30)^2$ b) $A = \pi(30)$

c) $A = \pi(15)^2$ d) $A = \pi(15)$

10. A cookie cake has a diameter of 9 inches. What is the approximate area of the cake? *Use 3 for π.*

60.75 in^2

11. Which expression could be used to find the diameter of a circle with a radius of 2.75 inches?

a) 2.75 ÷ 2 b) 2.75 • 2 c) 2.75 • 3 d) 30 ÷ 3

For questions 12-20, complete the table for circles. Use 3.14 for π
Write only your answers inside the chart.

Radius	Diameter	Circumference	Area
4 cm	12) 8 cm	13) 25.12 cm	14) 50.24 cm^2
15) 7 m	**14 m**	16) 43.96 m	17) 153.86 m^2
18) 6 ft	19) 12 ft	**37.68 ft**	20) 113.04 ft^2