**Geometry Unit B Part 1: Circles and Composite Area**

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Class\_\_\_\_\_\_\_\_\_

**Part 1: Circles. SHOW ALL WORK.**

Formula for AREA of a circle:*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_* Formula for CIRCUMFERENCE:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **Radius = \_\_\_\_\_\_\_\_\_\_ 2. Radius = \_\_\_\_\_\_\_\_\_\_**

**Diameter = \_\_\_\_\_\_\_\_ Diameter = \_\_\_\_\_\_\_\_**

**A = \_\_\_\_\_\_\_\_\_\_ A = \_\_\_\_\_\_\_\_\_\_**

**C = \_\_\_\_\_\_\_\_\_\_\_ C = \_\_\_\_\_\_\_\_\_\_\_**

1. **9.4 mm DIAMETER 4. 3.4 ft. radius**

**Radius = \_\_\_\_\_\_\_\_\_\_ Radius = \_\_\_\_\_\_\_\_\_\_**

**Diameter = \_\_\_\_\_\_\_\_\_ Diameter = \_\_\_\_\_\_\_\_\_\_**

**Area = \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Area = \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Circumference = \_\_\_\_\_\_\_\_\_\_\_\_\_ Circumference = \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**5.** Find the area of the half-circle. **SHOW ALL WORK.**

 **A = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. **A pizza has a diameter of 8 inches. Find the area and circumference. Show all work.**

**A = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ C = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. **The radius of a birthday cake is 5 cm. Icing will decorate the circumference of the cake. How much icing is needed?**
2. **An area rug has a diameter of 6 feet. How many square feet will the rug cover?**

**Part 2: Composite Figures**

*Instructions: Find the area of the shape. Make sure to include your units and circle your answer.* **(ADD THE AREAS)**

**6.**  *A =* $\frac{(b)(h)}{2}$**7.** *A =* $π$*(r)(r)*

 *A = (l)(w) A = (l)(w)*

**A=\_\_\_\_\_\_\_\_\_\_\_\_\_\_ A = ­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**



**8.**  **9.**

**A = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ A = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Shaded Areas: Find the area of the SHADED REGIONS. (SUBTRACT AREAS.)**

**10.**  **11.**

**A = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ A = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**12.**

**A = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**