**Measurement**

**Unit 1 Line Master 8a**

 Explore the Area of a Circle 2

1. Cut apart the sections of this circle.
 ****

2. Arrange and glue the pieces inside the rectangle ABCD as shown.
 

 Explore the Area of a Circle 2 (cont’d)

**Measurement**

**Unit 1 Line Master 8b**

 

3. Determine the area of rectangle ABCD to approximate the area

 of the circle.

4. The area of a rectangle relates to the measures of a circle:

 Area of rectangle ABCD = AB × BC

 = π*r* × *r*

 = π*r*2

a) The length of the rectangle, AB, is approximately half
of the circumference, or π*r*. Explain why.

b) Why is the width of the rectangle, BC, the same as
the radius, *r*?