

Geometry

Name _____ Period _____ Date _____ Group _____ Title _____

1. Description of Your Geometric Shape

You have a rectangle that is 4 inches height and 8 inches wide. The 8 inch side of the rectangle is also the diameter of a semi-circle extending away from the rectangle. On one of the 4 inch sides of the rectangle is another semi-circle 4 inches in diameter extending away from the rectangle. On the other 8 inch side of the rectangle is a 4 inch square extending away from the rectangle. The square is touching exactly one half of the 8 inch side of the rectangle. On one side of the square is an equilateral triangle with the point (apex) extending away from the square and rectangle.

2. Use the geometric shapes in your group package and form this complex geometric object. Make a sketch of the completed shape on the back of this sheet.

3. Label the shapes based on the below chart

- A Rectangle
- B Semi-circle 8 inches in diameter
- C Semi-circle 4 inches in diameter
- D Square 4 inches on a side
- E Equilateral triangle exactly touching one side of the square

4. Calculate the area of each of the shapes. First write any formula then solve the formula.

Area of A:

Area of B:

Area of C:

Area of D:

Area of E:

Total Area:

5. Calculate the exterior perimeter of the shapes. First write any formula then solve the formula.

Exterior perimeter of A:

Exterior perimeter of B:

Exterior perimeter of C:

Exterior perimeter of D:

Exterior perimeter of E:

Total exterior perimeter: