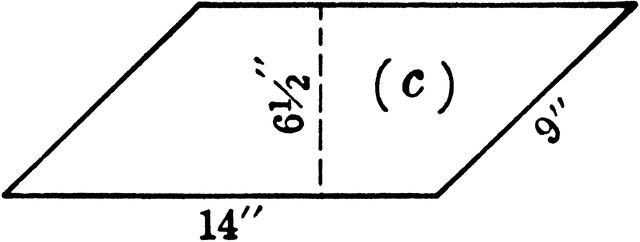
Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1/6/12 **Geometry Topics Packet**

**Chapter 1**

1. A circle has 360 lines of reflection symmetry. True / False
2. A rectangle has 2 lines of reflection symmetry. True / False
3. A graph of a parabola has no lines of reflection symmetry. True / False
4. A square has 270-degree rotational symmetry. True / False
5. A pentagon has no lines of reflection symmetry. True / False
6. A triangle has 180-degree rotational symmetry. True / False
7. I can translate an image to make it look upside-down. True / False
8. A perfectly-drawn heart has rotational symmetry. True / False
9. A perfectly-drawn heart has reflection symmetry. True / False
10. Reflections, rotations and translations are all types of transformations. True / False
11. I enjoy graphing rotated polygons on a coordinate plane. True / False

**Chapter 2**

1. Vertical angles are always congruent/supplementary
2. Corresponding angles are always congruent/supplementary
3. Alternate-interior angles are always congruent/supplementary
4. Same-side interior angles are always congruent/supplementary
5. A pair of straight angles (think windshield wiper) are always congruent/supplementary.
6. The three angles in a triangle add up to 360.
7. I still haven’t figured out what the three angles in a triangle add up to. True / False
8. The three angles in a triangle add up to:
9. The Pythagorean theorem works for any triangle.
10. Write the formula for area of a rectangle:
11. Write the formula for area of a triangle:
12. Write the formula for area of a trapezoid:
13. Find the area of this parallelogram:  
      
    Area =
14. The shortest distance between two points is a straight line. True/False
15. If I am a square, then I am a rectangle. True / False
16. If I am a rectangle, then I am a square. True / False
17. If you wear a red shirt tomorrow, then I will eat a cheeseburger. I ate a cheeseburger. Therefore, you wore a red shirt. True / False

**Chapter 3**

1. Similar figures have the same shape but different sizes. True / False
2. Square A has area of 25 cm sq. Square B has area of 100 cm sq. Their ZOOM FACTOR is 4. True / False
3. Dilation is a transformation that creates a similar figure. True / False
4. If I increase the width of a picture by 200% and I increase the height by 300%, I have performed a dilation and the pictures are similar. True / False
5. All squares are similar. True / False
6. All rectangles are similar. True / False
7. All circles are similar. True / False
8. All pentagons are similar. True / False
9. All regular pentagons are similar. True / False
10. In similar triangles, all the angles are the same. True / False
11. In similar triangles, all the sides are proportional to each other. True / False
12. Triangles with side lengths 3-4-5 and 6-8-10 are similar. True / False
13. The triangles in #12 must be right triangles. True / False
14. Angles don’t change when something changes size but does not change shape. True / False
15. There are three ways to prove SIMILARITY. List them:

1.

2.

3.