Geometry - Chapter 1 Test Review   Name: _____   Hour: _____

You WILL need additional pieces of paper for this. Don't try to cram it all on this review sheet.

Concepts Covered:
1.1
- Be able to identify (label), define, and sketch Lines, Rays, and Line Segments
- Understand and apply the definitions of Coplanar, Collinear, and Intersect.
- Determine if points are collinear, coplanar, or intersect given a picture.

1.2
- Understand and apply the definitions of Congruent and Distance to answer questions.
- Be able to plot ordered pairs on the coordinate plane and then determine the distance of the segment(s) created.
- Determine if two or more segments are congruent.

1.3
- Understand, be able to define, and use the definitions of the following terms: Midpoint, Segment Bisector.
- Use the midpoint formula to find the midpoint between two points.
  Given (x_1, y_1) & (x_2, y_2) $Midpoint: \left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$
- Use the distance formula to find the distance between two points.
  Given (x_1, y_1) & (x_2, y_2) $Distance: d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$

1.4
- Understand, be able to define, and use the definitions of the following terms: Perimeter, Area, Polygon, Concave, Convex
- Find the area of a shape given coordinates for the vertices using smaller shapes like rectangles and triangles
- Read, comprehend and complete word problems where you must find areas or perimeters given a picture or coordinates of vertices of polygons.

1.5
- Understand and define Acute, Right, Obtuse and Straight angles.
- Measure angles accurately using a protractor
- Construct an angle of any given measurement using a protractor
- Solve problems of determining angle measures by using previous vocabulary and algebra skills

1.6
- Understand and define Complimentary, Supplementary, Adjacent Angles, Linear Pairs, and Vertical Angles
- Solve problems of determining angle measures by using previous vocabulary and algebra skills

Vocab Questions:

1. A Line MUST be: _____

2. A Ray starts at a _____ and continues in a _____ Line _____.

3. A Line Segment starts at a _____ and ends at a _____.

4. Two points are Collinear if they _____.

5. Two lines are Coplanar if they _____.

6. Two lines intersect if they _____.

7. The perimeter of a shape is found by _____

8. A Segment Bisector cuts a line segment _____.

9. An Angle Bisector cuts an angle _____.

10. Acute angles must be between _____ degrees and _____ degrees.

11. A right angle measures _____ degrees.

12. An obtuse angle measures between _____ degrees and _____ degrees.

13. A Straight Angle measures _____ degrees.

14. Two angles are complimentary if they _____

15. Two angles are Supplementary if they _____

16. Two angles are Adjacent if they _____

17. Two angles are Linear Pairs if they _____

1.1 Problems: No two points should have the same letter as a name. Use previously sketched points as you progress.

18. Sketch a Ray that can be labeled TO.

19. Sketch a line segment AB that has a midpoint of T

20. Sketch a line labeled BD that is parallel to Ray TO.

21. Add a collinear point P to the line BD.

22. Add a point J that is not collinear to any previously drawn ray/line.

23. Sketch the ray JA.

1.2 Problems:

24. Plot the points and determine if the segments AB and CD are congruent. A(-5, 6), B(-5, -1), C(-4, 3), D(3, 3)

25. Plot the points and determine if the segments AB and CD are congruent. A(10, -4), B(3, -4), C(-1, 2), D(-1, 5)

(24 and 25 can either be done by sketch them on graph paper and Accurately using a ruler to determine length, or by using the distance formula from section 1.3)

26. Draw the figure and determine the length of AB. AC is a line segment. B is between A and C. AC = 15 and BC = 9

27. Draw the figure and determine the length of GH. GH is a line segment. K is between G and H. GK = 17 and KH = 21

1.3 Problems:

The following problems in your textbook and have been hand-picked by me. Work them out to review for 1.3 problems.

Pages 24-25   Numbers: 9, 10, 17, 18, 25-27

1.4 Problems:

The following problems in your textbook and have been hand-picked by me. Work them out to review for 1.4 problems.

Pages 32-34   Numbers: 9-11, 15, 16, 19-21

28. A triangle has a base of 7, a height of 2x-15, and an area of 40 square units. Find the value of x.

29. A Rectangle has a length of 4x+7 and a width of 5, with a perimeter of 51 units. Find the value of x.

1.5 Problems:

The following problems in your textbook and have been hand-picked by me. Work them out to review for 1.5 problems.

Pages 42-43   Numbers: 21, 28-32, 37-39

1.6 Problems:

30. Find the value of all missing angles.