**ML #2: Special Angles (Math 7 – Angles Unit)**

Vocabulary: Diameter Radius

1. In a circle there are \_\_\_\_\_\_\_\_\_\_\_\_ degrees.
2. Draw a horizontal diameter.
3. There are \_\_\_\_\_ degrees in a semi-circle.
4. Draw a radius (not straight up and down) on the top half of the circle.
5. Label the angle to the left 1 and the angle on the right 2.
6. What is the total measure of angle 1 + angle 2? \_\_\_\_\_\_\_.

**RULE:** If the measures of two angles add to \_\_\_\_\_\_, they are said to be \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. In a circle there are \_\_\_\_\_\_\_\_\_ degrees.
2. Draw a horizontal diameter.
3. There are \_\_\_\_\_\_\_ degrees in a semi-circle.
4. Draw a vertical diameter.
5. How many parts of the circle do you have? \_\_\_\_\_\_\_\_\_\_\_.
6. Each part of the circle contains \_\_\_\_\_\_\_\_ degrees.
7. Draw a ray in one quarter of your circle.
8. Label one side of the ray angle 3 and the other side angle 4.
9. What is the total measure of angle 3 + angle 4? \_\_\_\_\_\_\_\_\_.

**RULE:** If the measures of two angles add to \_\_\_\_\_, they are said to be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. Draw two diameters in the circle (any direction, but do not create right angles).
2. Label the angles formed, angle 5, 6, 7, 8.
3. What do you notice about angles 5 and 7? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. What do you notice about angles 6 and 8? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
5. \_\_\_\_\_\_\_\_\_\_\_ angles are angles that are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ each other.

**RULE:** If two angles are \_\_\_\_\_\_\_\_\_\_ angles, their measurements are \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. Name the angle to the right using 3 letters. \_\_\_\_\_\_\_\_\_.

A

B

C

D

1. Draw a ray from the vertex of the angle through point D.
2. Label the angle formed on top angle 9 and the angle formed

below angle 10. How many different angles are there? \_\_\_\_.

1. If you only knew the measures (in degrees) of ∠9 and ∠ABC,

C

how could you find m∠10? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. If you knew m∠9 and m∠10, how would you find m∠ABC? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Angle 9 and angle 10 are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_angles because they share a common \_\_\_\_\_\_\_\_\_\_\_ and are \_\_\_\_\_\_\_\_\_\_\_\_\_\_ to each other.

**RULE:** m∠ABC= \_\_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_\_\_.

**REVIEW….**

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| **Angle Relationships** | **Picture** | **Definition** |
| Supplementary Angles |  |  |
| Complementary Angles |  |  |
| Vertical Angles |  |  |
| Adjacent Angles |  |  |