**GMF 10 Week 1 (April 6-9, 2020)**

*Instructions: Please complete the following questions by researching online and then turn them in on Teams when finished.*

**Angles:**

1. What is the definition of an angle?
2. We measure angles with an instrument called a \_\_\_\_\_\_\_\_\_\_\_\_\_.
3. Name and describe each of the following types of angles. Give an example of that type of angle from your house (first one is done as an example)

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Type of angle** | **description** | **example from my house** |
|  | right angle | measures exactly 90° | every wall in my house meets at a right angle |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

1. **Reference angles:** angles that are easy to visualize, which we use to estimate a given angle.

*Reference angles:*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |

Use the above reference angles to estimate the measurements in degrees, for the following angles. Include the type of angle (the first is done as an example)

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Angle Type: **Acute** | Angle Type: | Angle Type: |
| Estimate: **70°** (looks less than 90°, but more than 60°) | Estimate: | Estimate: |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Angle Type:  | Angle Type: | Angle Type: |
| Estimate:  | Estimate: | Estimate: |

1. **Complimentary and Supplementary Angles:**

Supplementary angles are two angles whose sum is 180 degrees while complementary angles are two angles whose sum is 90 degrees.

Watch this video (<https://www.youtube.com/watch?v=h9zUbWPqVpc> ) and then answer the following questions (note for video: *adjacent* just means next to each other)

* 1. What angle is supplementary to 60°? \_\_\_\_\_\_\_\_
	2. What angle is complementary to 30°? \_\_\_\_\_\_\_\_
	3. 20° and 70° together are which types of angles? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	4. 120° and 60° together are which types of angles? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Use this diagram to answer the rest:



* 1. Angle AXY is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to angle CXY
	2. Angle AXY is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to angle BXY
	3. If angle DXY is 140° then what is the measurement of angle BXY? \_\_\_\_\_\_\_\_



1. **Angle bisectors**: A line that splits an angle into two equal angles.

What would be the angle measurement of the bisector of the following angles:

* 1. An angle that measures 100° would have a bisector of \_\_\_50°\_\_\_\_
	2. An angle that measures 68° would have a bisector of \_\_\_\_\_\_\_
	3. An angle that measures 70° would have a bisector of \_\_\_\_\_\_\_
	4. An angle that measures 16° would have a bisector of \_\_\_\_\_\_\_
	5. An angle that measures 240° would have a bisector of \_\_\_\_\_\_\_
1. Watch the following video and then describe, in your own words, how to bisect an angle with a compass. <https://www.youtube.com/watch?v=nysMOfPsAfI>

**Great work!! You did your first online learning math assignment 😊**