**Trigonometric Ratios Activity**

**Learning Target:**

**Trigonometry:**

A ratio of the lengths of two sides of a right triangle is called a trigonometric ratio.

 Sine:  Cosine:  Tangent: 







1. Complete the chart using the triangles. Round answers to the nearest ten thousandths.

|  |  |  |  |
| --- | --- | --- | --- |
| Angle | Sine | Cosine | Tangent |
|  ∠A =  |  |  |  |
|  ∠C =  |  |  |  |
|  ∠D = |  |  |  |
|  ∠F =  |  |  |  |
|  ∠G =  |  |  |  |
|  ∠I =  |  |  |  |
|  ∠J =  |  |  |  |
|  ∠L =  |  |  |  |

2) Use your calculator to find the following. Round answers to the nearest ten thousandths.

sin 60° = \_\_\_\_\_\_\_ cos 60° = \_\_\_\_\_\_\_ tan 60° = \_\_\_\_\_\_\_

sin 30° = \_\_\_\_\_\_\_ cos 30° = \_\_\_\_\_\_\_ tan 30° = \_\_\_\_\_\_\_

sin 70° = \_\_\_\_\_\_\_ cos 70° = \_\_\_\_\_\_\_ tan 70° = \_\_\_\_\_\_\_

sin 20° = \_\_\_\_\_\_\_ cos 20° = \_\_\_\_\_\_\_ tan 20° = \_\_\_\_\_\_\_

1. How are the sine and cosine values related for complementary angles? Use the handout “Values of Trigonometric Functions” along with your answers to #2 to answer this question.