**Math 11 AWP: Trigonometry Unit Project**

**Due: Nov 28, 2016**

For this project, you will be creating an instruction manual for a future grade 10/11 student about how to use the trig ratios (sine, cosine, and tangent), as well as the Pythagorean Theorem. This manual may be in the form of a poster or a brochure. You may use technology, but there will not be class time in a computer lab. The project must be handed in on paper.

Required Elements:

* What is the Sine ratio (a diagram and a description) /1
* One example for finding a missing length using Sine with solution /2
* One example for finding a missing angle using Sine with solution /2
* One word problem for finding a missing length using Sine with solution /4
* One word problem for finding a missing angle using Sine with a solution /5
* What is the Cosine ratio (a diagram and a description) /1
* One example for finding a missing length using Cosine with solution /2
* One example for finding a missing angle using Cosine with solution /2
* One word problem for finding a missing length using Cosine with solution /4
* One word problem for finding a missing angle using Cosine with a solution /5
* What is the Tangent ratio (a diagram and a description) /1
* One example for finding a missing length using Tangent with solution /2
* One example for finding a missing angle using Tangent with solution /2
* One word problem for finding a missing length using Tangent with solution /4
* One word problem for finding a missing angle using Tangent with a solution /5
* One problem involving two (2) steps with a worked solution. /4
* What the Pythagorean theorem is /1
* One example to find the hypotenuse using the Pythagorean Theorem that includes a diagram, question and solution /2
* One example to find either leg length hypotenuse using the Pythagorean Theorem that includes a diagram, question and solution /2
* One word problem to find the hypotenuse using the Pythagorean Theorem that includes a diagram, question and solution /4
* One word problem to find either leg length using the Pythagorean Theorem that includes a diagram, question and solution /5

The entire project will be worth 60 marks.

Timeline for project:

Nov 15: Introduce project, and determine form of project.

Remember: Any time in class where you have finished your assignments can be used to work on the project.

Nov 24: Class time to complete project

Nov 25: Class time to peer and self assess and make any revisions.

Nov 28: Projects due. Anyone who does not hand in their project by this date will be writing a test.