**Unit 1: Trigonometry**

# Unit Outline

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| **DAY** | **TOPIC** | **KEY IDEAS** | **HOMEWORK** |
| Wednesday  Sept 6 | 1.0 Review Prior Knowledge | *a2 + b2 = c2* | p. 2 #1-3  p. 3#1-3 |
| Thursday  Sept 7 | 1.1 Primary Trigonometric Ratios | SOH CAH TOA  Inverse ratios (sin-1, cos-1, tan-1) | p. 8 #3, 4, 5, 6 |
| Friday,  Sept 8 | 1.2 Applications of Primary Trig Ratios | Angle of inclination/depression | p. 8 #7, 8, 9, 11, 13 |
| Monday,  Sept 11 | 1.3 Obtuse Angle Investigation | Supplementary Angles | p. 19 #1, 5, 6 |
| Tuesday,  Sept 12 | 1.4 Trigonometric Ratios in Obtuse Angles |  | p. 23 #2, 4ab, 5ab, 6ab, 8, 10abc, 11abc, 13, 14 |
| Wednesday,  Sept 13 | **Quiz**  **Work Period** |  |  |
| Thursday,  Sept 14 | 1.5 The Sine Law |  | p. 31 #3, 5, 8, 9, 10, 15, 17 |
| Friday,  Sept 15 | 1.6 The Cosine Law | (For sides)  (angles) | p. 38 #3, 5, 6, 8a, 9, 11, 13 |
| Monday,  Sept 18 | 1.7 Sine and Cosine Law Applications |  | p. 47 #1-3, 7, 12, 14, 16 |
| Tuesday,  Sept 19 | Review |  | p. 54 # 1, 2, 4, 6-27 |
| Wednesday,  Sept 20 | **Unit Test** |  |  |

# \*Dates are subject to change based on school activities or class needs\*

# Learning Goals:We are learning to…

* Find the measure of sides and angles in right triangles using primary trigonometry ratios (SOH CAH TOA)
* Find the sine, cosine, and tangent of obtuse angles

**B**

**A**

**C**

**a**

**b**

**c**

* Find the measure of sides and angles in non-right triangles using the sine law
* Find the measure of sides and angles in non-right triangles using the cosine law
* Describe conditions that determine when to use sine law, and when to use cosine law

# Success Criteria: I can…

* Label the opposite, adjacent, and hypotenuse of a right triangle according to the angle of interest
* Determine which primary trigonometry ratio to use to solve a triangle

**D**

**F**

**E**

**f**

**d**

**e**

* Determine when it is appropriate to use inverse ratios (sin-1, cos-1, tan-1)
* Label angles of inclination and angles of depression
* Use properties of supplementary angles to find the sine, cosine, and tangent of obtuse angles
* Use sine law and cosine law to calculate sides and angles in a non-right triangle