## MCT 4CI Learning Goals Unit 4 - Polynomial Functions

- to be able to determine the vertex and properties of any quadratic function (parabola)
- solve and sketch polynomial equations and inequations
- solve problems involving polynomial equations

| Knowledge \& Skills | I have <br> reviewed <br> it | I have <br> done <br> questions | I think <br> I've got <br> this |
| :--- | :--- | :--- | :--- |
| Factoring: common, trinomial, difference of squares |  |  |  |
| Determine the vertex of a quadratic function (parabola) by <br> completing the square (no decimals) |  |  |  |
| Sketch and state max/min \& when it occurs for parabolas |  |  |  |
| Solve and sketch quadratic equations |  |  |  |
| Use the quadratic formula to get simplified, exact answers. <br> Ex <br> E 2 <br> 3 |  |  |  |
| Divide polynomials and state the division statement |  |  |  |
| Factor higher degree polynomials using polynomial division |  |  |  |
| Factor higher degree polynomials using smile twice |  |  |  |
| Solve and sketch higher degree equations |  |  |  |
| Solve polynomial equations with fractions |  |  |  |
| Solve polynomial inequations by sketching |  |  |  |
| Applications Of Polynomial Functions |  |  |  |
| Grade 10 / 11 quadratic word problems |  |  |  |
| Plane's height above ground type |  |  |  |
| Dimensions of the cardboard box type |  |  |  |

