**Pre-Calculus 11**

**Chapter 4 ~ Quadratic Equations**

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| **Learning Outcomes ~ Student can:** |
| Q3 | factor polynomial expressions of the form* $ax^{2} +bx + c$ or $a(f\left(x\right))^{2}+b\left(f\left(x\right)\right)+c$, $a \ne 0$
* $a^{2}x^{2}-b^{2}y^{2}$or$a^{2}(f\left(x\right))^{2}-b^{2}(g\left(y\right))^{2}$*,* $a \ne 0$*,* $b \ne 0$

(where $a$*,* $b$ and $c$ are rational numbers). |
| Q4 | solve problems that involve quadratic equations (graphing, factoring, completing the square, and quadratic formula). |

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| **Date** | **Topic** |
| Friday, September 27 | Factoring Review from Grade 10 (Puzzle Worksheets) |
| Tuesday,October 1 | Lesson 4.1 ~ Graphical Solutions of Quadratic Equations (Practice 4.1 Worksheet & pg 215 (use graphing calculator) #6, 7,  9, 10, 17, 18)Lesson 4.2 Part 1 ~ Factoring Quadratic Equations  (Practice 4.2 Part 1 Worksheet & pg 230 #5, 6) |
| Thursday,October 3 | **Quiz 4.1 & Factoring**Lesson 4.2 Part 2 ~ Solving Quadratic Equations by Factoring (Practice 4.2 Part 2 Worksheet & pg 230 #8, 9, 11, 14, 15, 18 - 20,  23)Lesson 4.3 ~ Solving Quadratic Equations by Completing the Square  ("Moving Words" Worksheet & pg 240 #4cd, 5cde, 6, 13) |
| Monday,October 7 |  **Quiz 4.2 & 4.3**Lesson 4.4 ~ The Quadratic Formula  ("Theater" & "Soil Erosion" Worksheets & pg 254 #5, 6, 8, 10, 11, 12,  14, 15, 17) |
| Wednesday,October 9 | **Quiz 4.4**Review  (pg 258 – 262 #1abe, 3 – 12, 14, 18 – 21, 1 – 6, 8 – 14) |
| Tuesday,October 15 | **Chapter 4 Test** |

**New Vocabulary**

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| **Term** | **Definition** | **Example** |
| Quadratic Equation |  |  |
| Root(s) of an Equation |  |  |
| Zero(s) of a Function |  |  |
| Extraneous Root |  |  |
| Quadratic Formula |  |  |
| Discriminant |  |  |

