**Pre-Calculus Mathematics 10**

**Chapter 2 Test**

(2.0)

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_**

**Mr. Formaran**

**True or False (4 marks)**

\_\_\_\_\_\_\_\_ a. A term is a number or a product of a number with one or more variables

which can be raised to a power

\_\_\_\_\_\_\_\_ b. FOIL is an acronym for FIRST, OUTSIDE, INSIDE, LAST

\_\_\_\_\_\_\_\_ c. When a polynomial has four terms, another form of removing common factors

is called factoring by grouping

\_\_\_\_\_\_\_\_ d. The factors of x2 + 4x + 4 = (x + 2) and (x + 2)

\_\_\_\_\_\_\_\_ e. We can use the ac-Method to factor an expression in the form ax2 + bx + c

\_\_\_\_\_\_\_\_ f. A trinomial that is a square of a binomial is called a perfect square trinomial.

\_\_\_\_\_\_\_\_ g. (x – 2) = (2 – x)

\_\_\_\_\_\_\_\_ h. (x + 6)2 = (x2 + 36)

**Section 2.1 \_\_\_\_\_\_\_/4 marks**

Find the value of the following when x = 3

1. x3 – 5x + 2 2. x2 – 3

3 – x2

Find the product and simplify if possible

1. 5m (3m2 + 5mn – 3n2) 2. 2a3b4c (4ab – 2ac + 8bc – 2a3b2c)

**Section 2.2 \_\_\_\_\_\_\_/4 marks**

Multiply

1. (5x – 3)(3x + 5) 2. (3a + 7b) (3a2 + 6ab – 5b2)

3. (a – x)(x – a) 4. (4a – 7b)2

**Section 2.3 \_\_\_\_\_\_\_/4 marks**

Factor

1. 22m4a2t3h + 11 m5a7t8h – 33 m2a5th4 2. 3c(ma + th) – 5c(ma + th)

3. ad2 – a2 + 2d2 – 2a 4. 5m3 + 10m2 – 4m – 8

**Section 2.4 \_\_\_\_\_\_\_/4 marks**

Factor

1. x2 + 13x + 42 2. x2 – 3x – 54

3. y2 – 12y + 36 4. 4e3 – 4e2 – 8e

**Section 2.5 \_\_\_\_\_\_\_/4 marks**

Factor

1. 3m2 + 6m + 3 2. 12w2 – 11w – 20

3. 6e2 – 15eu + 6u2 4. - 8b2 + 24bv – 18v2

**Section 2.6 \_\_\_\_\_\_\_/4 marks**

Factor **completely**

1. m2 – n2 2. 16x4 – 625y4

3. m4 – 8m2 + 16 4. 49m2 + 28mn + 4n2

**Challenge: \_\_\_\_\_\_\_/2 marks**

Factor 36(k - 2)2 – 6(k - 2) – 2

**Reflection: (Participation) 4 marks**

1. The area I feel I am the strongest is/are:

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because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. The area that is challenging for me in this unit is/are:

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because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. My plan for improving my area of weakness is /are:

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4. I feel my reflection grade for this reflection should be \_\_\_\_/4