**Pre-Calculus Mathematics 10**

**Chapter 1 Test**

(2.0)

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

 Mr. Formaran

**True or False (4 marks)**

\_\_\_\_\_\_\_\_ a. Every real number is a natural number.

\_\_\_\_\_\_\_\_ b. Greatest Common Factors are always smaller than Least Common Factors

\_\_\_\_\_\_\_\_ c. Numeral 81 is a perfect square and cube number.

\_\_\_\_\_\_\_\_ d. An irrational number is a non-repeating, or non-terminating decimal value.

\_\_\_\_\_\_\_\_ e. An exponent tells how many times the base is used as a factor.

\_\_\_\_\_\_\_\_ f. An expression such as 2 5 is called a mixed root and 8 is called an entire root.

\_\_\_\_\_\_\_\_ g. 2, 3, 5, 7, 11, 13, 17, 19, 23, 29 are the first 10 prime numbers

\_\_\_\_\_\_\_\_ h. 161/4 when simplified is equal to 4

**Section 1.1**

**Put a check mark for each set that the number is a part of (3 marks)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Numerals | Natural Numbers | Whole Numbers | Integers | Rational Numbers | Irrational Numbers | Real Numbers |
| What is √25? - Quora-12.3 |  |  |  |  |  |  |
|   |  |  |  |  |  |  |
| 0 ½  |  |  |  |  |  |  |

**Section 1.2**

**For each number on the left, place a check mark under the numbers it is divisible by (2 marks)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Numerals | 2 | 3 | 4 | 5 | 6 | 9 | 10 |
| 1000 |  |  |  |  |  |  |  |
| 2022 |  |  |  |  |  |  |  |

**Find the GCF and LCM of the following: (2 marks)**

36, 54, 90 125, 150, 325

**Section 1.3**

**Determine the roots without a calculator. (3 marks)**



 3 512 4 2401

**Section 1.4**

**Determine if the number is a rational or irrational number without calculator. (3 marks)**

 400 3. 1000 5  55555

**Section 1.5**

**Simplify. Express without brackets or negative exponents. (4 marks)**

 0

 5a2b 2 2x4y-3 -4 -5x13y0  -8

 6a3b4 x-7y11 15x-10y

 25 x 20 53 x 25

 4 x 3 22 125 x 3 25

**Section 1.6**

**Express as an entire radical (2 marks)**

 2 3 5 3a 2 12a2b4

**Simplify each radical (2 marks)**

 81x2y3 5 32M8A7T8H7

**Reflection: (Participation) 4 marks**

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

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

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

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

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

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

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

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

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

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

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

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

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