Algebra II – Mrs. Tilus This fabulous review belongs to: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Unit 4 Review- **Unit 4 Test: December 20th /21st**

1. (4pts) **Simplify** and **state the degree** of the polynomial below.

2. Simplify by applying the laws of exponents.

a) (-5x4)2(3xy5) b) (2)3

c. d.

3. Multiply the polynomials, and simplify your answer.

a) ()2 b)

4. Write each term as a **product of prime numbers and variables** by using a factor tree.

Then find the GCF and LCM of the following monomials. Make sure to show factor trees and **simplify** your answers.

**GCF=** \_\_\_\_\_\_\_\_\_\_\_\_

**LCM=** \_\_\_\_\_\_\_\_\_\_\_

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

**SHOW ALL WORK TO RECEIVE FULL CREDIT**

5. Use the appropriate method to factor the following polynomials. (ONE is prime)

1. b.

c. d.

e. f.

g. h.

6. Solve each of the following polynomial equations.

1. b)
2. d)

7. Find and graph the solution set of .

Solution set: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



8. A rectangular residential lot with area 7475 m2 is 50 m longer than it is wide. Find the dimensions of the lot.