**Algebra 1: Polynomials Test Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Solve for x.**

1. 2.

**Simplify:**

1. 4.
2. 6.
3. 8.

**Simplify:**

1. 9.
2. 11.
3. 13.

**15. Area:**

3x + 2

4x – 7 **16. Perimeter:**

**17. Perimeter:**  4x - 2 4x - 2

3x

**18. Area:**

**4x**

2x - 10

For the quadratic equation: x2 - 2x – 3 = 0, find the:

19. Vertex: \_\_\_\_\_\_

20. Simplify: (2x + 3)2

**3x** 2x + 10

**4x – 2**

8x + 4

21. Find the area of the large rectangle: 22. Find the area of the small rectangle:

23. Find the area of the shaded region:

**Find the GCF of the following polynomials.**



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

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

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

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

**Find the GCF then factor.**

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Extra Credit (1 point each): Factor the given polynomials.**

1. ( )( )
2. ( )( )
3. ( )( )
4. ( )( )
5. ( )( )

39. A new computer costs $4,000. Its value depreciates $1250 each year. Write a function to represent the value of the computer after x years.

40. What is the computer worth after 2 years?

Solve for x:

41.

42.