Algebra 1

Chapter 8 Part 2 Review

<u>Target 8-4:</u> I can factor polynomials using the GCF (distributive property).

<u>Target 8-5:</u> I can factor trinomials and binomials with a leading coefficient of one using any method.

<u>Target 8-6:</u> I can factor trinomials and binomials with a leading coefficient greater than one using any method

(All targets are mixed together below)

Factor the following polynomials completely! Be sure to use the best method. Box your answer.

1.
$$8m - 6$$

2.
$$h^2 + 9h + 18$$

3.
$$2b^2 + 16 - 18b$$

4.
$$6a^2 - 17a + 12$$

5.
$$x^2 - 256$$

6.
$$-6mp + 4m + 18p - 12$$

7.
$$g^2 + 3g - 10$$

8.
$$16d^2 - 4$$

9.
$$x + x^2y + x^3y^2$$

11.
$$f^3 + 2f^2 - 64f - 128$$

12.
$$24x^2 + 108x - 60$$

<u>Target 8-7:</u> I can use factoring and the zero product property to solve quadratic equations.

Solve the following quadratics by factoring. Make sure to box your answers!

1.
$$(4y + 8)(3y - 4) = 0$$

2.
$$8q^2 - 10q + 3 = 0$$

3.
$$2z^2 + 20z = 0$$

4.
$$6b^2 - 5b = 4$$

5.
$$9x^2 = 27x$$

7.
$$10g^2 + 10 = 29g$$

8.
$$15n^2 - n = 2$$

- 9. **Construction:** A construction company is planning to pour concrete for driveway. The length of the driveway is 16 feet longer than its width.
 - a. Draw a picture
 - b. Write an expression for the area of the driveway.
 - c. Find the dimensions of the driveway if it has an area of 260 square feet.

Name/Period:		

10. **Picture Frame:** A picture measures 8cm by 12cm. The entire frame as an area of $140 \ cm^2$. What is the width of the frame.

