**Name: Period: Job 26 Factoring Polynomials (GCF)**

**Part 1: Textbook**

Textbook Lesson 7-4 Page 285: 30, 31, 32, 33, 34, 35

**Part 2: Algebra Regents Questions –**

The daily cost of production in a factory is calculate using $c\left(x\right)=200+16x$, where *x* is the number of complete products manufactured. Which set of numbers best defines the domain of *c(x)*?

 (1) integers (3) positive rational numbers

 (2) positive real numbers (4) whole numbers

1. What is the solution to the system of equations below?

$$y=2x+8$$

$$3\left(-2x+y\right)=12$$

(1) no solution (3) $(-1,6)$

(2) infinite solutions (4) $(\frac{1}{2},9)$

1. Write an exponential equation for the graph shown below.



Explain how you determined the equation.

1. Acidity in a swimming pool is considered normal if the average of three pH readings, p, is defined such that $7.0<p<7.8$. If the first two reading are 7.2 and 7.6, which value for the third reading will result in an overall rating of normal?

(1) 6.2 (3) 8.6

(2) 7.3 (4) 8.8

Factor out the GCF for the following:

1. 
2. $10a^{3}+20ab$
3. $-7m^{4}-21m^{2}+14m$

1. 

1. 
2. 
3. $x^{3}-13x^{2}-30x$