

$$12/12 = 0$$

Math 0097
University of North Georgia
Spring 2015
Quiz #7

Name: Key Date: April 10, 2015

Find the GCF of each list.

1. 18, 42, 84

$$18 = 2 \cdot 3^2$$
$$\begin{array}{c} \wedge \\ \textcircled{2} \cdot 9 \\ \wedge \\ \textcircled{3} \cdot \textcircled{3} \end{array}$$

$$42 = 2 \cdot 3 \cdot 7$$
$$\begin{array}{c} \wedge \\ \textcircled{2} \cdot 21 \\ \wedge \\ \textcircled{3} \cdot \textcircled{7} \end{array}$$

$$84 = 2^2 \cdot 3 \cdot 7$$
$$\begin{array}{c} \wedge \\ \textcircled{2} \cdot 42 \\ \wedge \\ \textcircled{2} \cdot 21 \\ \wedge \\ \textcircled{3} \cdot \textcircled{7} \end{array}$$

$$\text{GCF} = 2 \cdot 3 = \boxed{6}$$

2. $x^{10}y^2$, x^5y^3 , x^7y^{11}

$$\text{GCF} = \boxed{x^5y^2}$$

Factor out the GCF out of each expression.

3. $4x^2y + 12xy^2 - 16xy^3$

$$\text{GCF} = 4xy$$

$$\boxed{4xy(x + 3y - 4y^2)}$$