

Name _____

Common Monomial Factors notes cont.

Complete.

1) $4xy = 4x(\underline{y})$ 2) $25x^2 = 5x(\underline{5x})$
 $\begin{array}{c} | \quad | \quad | \\ 4 \cdot x \cdot y \end{array}$ $\begin{array}{c} \wedge \quad \wedge \\ (5) \cdot 5 \cdot (x) \cdot x \end{array}$
3) $3x^2y^2 = 3xy(\underline{xy})$
 $\begin{array}{c} | \quad \wedge \quad | \\ (3) \cdot (x) \cdot (y) \cdot x \end{array}$

Find the Greatest common factor

4) $2a$ and $6a$
 $\begin{array}{c} | \quad | \quad \wedge \quad | \\ (2) \cdot a \quad (2) \cdot 3 \cdot a \end{array}$
 $2a$

5) $15n$ and $5n$
 $\begin{array}{c} \wedge \quad | \quad | \quad | \\ (5) \cdot 3 \cdot n \quad (5) \cdot n \end{array}$
 $5n$

6) $3x$ and $6x^2$
 $\begin{array}{c} | \quad | \quad \wedge \quad \wedge \\ (3) \cdot x \quad (3) \cdot 2 \cdot x \cdot x \end{array}$
 $3x(1 + 2x)$
 $3x + 6x^2$

Factor.

7) $3x + 2x^2$
 $\begin{array}{c} | \quad | \quad | \quad | \\ 3 \cdot (x) + 2 \cdot (x) \cdot x \end{array}$

$x(3 + 2x)$

8) $2a^2 + 4a$
 $\begin{array}{c} | \quad \wedge \quad | \\ 2 \cdot a \cdot a + 2 \cdot 2 \cdot a \end{array}$

$2a(a + 2)$

9) $3x^2 + 15x$
 $\begin{array}{c} | \quad \wedge \quad | \\ (3) \cdot x \cdot x + (3) \cdot 5 \cdot x \end{array}$

$3x(x + 5)$

10) $5x + 25x^2$
 $\begin{array}{c} | \quad \wedge \quad \wedge \\ (5) \cdot x + (5) \cdot 5 \cdot x \cdot x \end{array}$
 $5x(1 + 5x)$

$5x(1 + 5x)$
 $5x + 25x^2$

Name _____ Period _____ Date _____

Algebra II 3.2 Assignment

Factor.

1. $9x + 3$

2. $4x - 16$

3. $2x - 10$

Find the GCF. Re-write with the GCF on the outside of the parenthesis.

4. $5x^2 + 25$

5. $4y + 24y^2$

6. $3x + 6xy + 12$

7. $2a^4 + 4a^3$

8. $3x + 9x^2$

9. $m^6 + 2m^2$

10. $5x^2 + 30x + 10$

11. $8x^5 + 4x^4$

12. $9x^3 + 36x^2$

13. $6v + 9vx^3$

14. $50n^2 + 25$

15. $20x^2 + 10x + 30$