

Secondary Math II
4-2 Factoring Quadratics

Name: _____
Period: _____

Objective: I can factor quadratic expressions.

Factor each expression completely:

1. $6xy^2 - 18y^3$

2. $a^2b + 7ab$

3. $3xy - x$

4. $x(x - 2) - 5(x - 2)$

5. $x^2 + 4x + 3$

6. $2x^2 + 4x - 7$

7. $x^2 - 7x + 10$

8. $m^2 + 6m - 7$

9. $6x^2 + 19x + 15$

10. $3b^2 - 3b - 18$

$$11. x^2 + 2x - 35$$

$$12. 2x^2 - 3x - 2$$

$$13. a^2 + 13a + 42$$

$$14. 4x^2 - 2x - 12$$

$$15. 3u^2 + 36u + 60$$

$$16. x^2 - 11x + 28$$

$$17. 2x^2 + 13x + 15$$

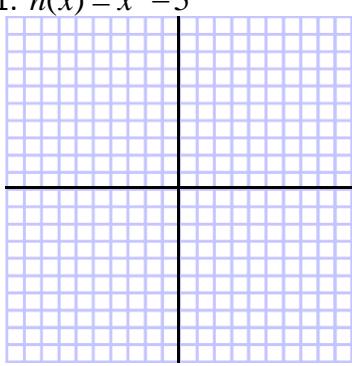
$$18. w^2 + 13w + 40$$

$$19. 3t^2 - 4t - 2$$

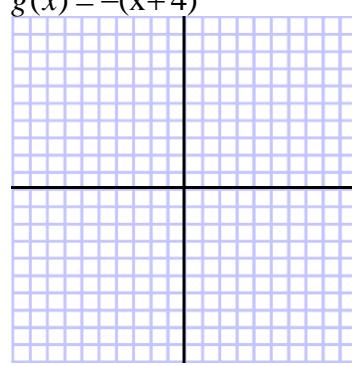
$$20. 3x^2 - 8x - 3$$

Review: Graph the function.

$$21. h(x) = x^2 - 5$$



$$22. g(x) = -(x+4)^2$$



Answer Key:

1. $6y^2(x - 3y)$
3. $x(3y - 1)$
5. $(x + 1)(x + 3)$
7. $(x - 2)(x - 5)$
9. $(2x + 3)(3x + 5)$
11. $(x - 5)(x + 7)$
13. $(a + 6)(a + 7)$
15. $3(u + 2)(u + 10)$
17. $(2x + 3)(x + 5)$
19. *Already factored*