

12.3.D2 ~ Factoring Polynomials

Past due on _____ Period _____

Factor each trinomial completely. (If necessary, refer to 12.3 example, "Factoring Trinomials" in the Chapter 12 Summary.)

1) $n^2 - 13n + 30$

2) $v^2 + v - 20$

3) $x^2 - 7x + 10$

4) $b^2 + 14b + 48$

5) $7p^2 + 11p + 4$

6) $3a^2 + 11a + 10$

7) $3x^2 + 5x + 2$

8) $5n^2 - 28n + 15$

9) $7x^2 - 26x - 8$

10) $2m^2 - 13m + 20$

11) $3k^2 + 8k - 16$

12) $2n^2 - 15n + 18$

Simplify the expression. (If necessary, refer to the 12.1 example "Adding & Subtracting Polynomial Expressions" in the Chapter 12 Summary.)

$$13) (3n^3 - 2n^2 + 2n) - (3n - 8n^2 - 5n^3)$$

Determine the product of the binomials. (If necessary, refer to the 12.2 example "Modeling the Product of Polynomials" in the Chapter 12 Summary.)

$$14) (p + 7)(7p^2 + 2p - 8)$$

Is the function a quadratic function? Explain your reasoning. If it is, then write it in standard form.

$$15) f(n) = -4(6n - 10) - n(1 - 6n)$$