A1 S2 w6d2 8-8 Factoring 4 Terms + X-box 3

1. Skill 12: Simply Exponential Expressions. Simplify, leaving no negative exponents. Show all steps.

$$\frac{\left(3r\bullet r^{-2}\right)^2 \bullet r^{-1} \bullet r^3}{\left(4r^2\right)^{-2} \bullet r^6}$$

2. Skill 13: Multiplying Polynomials: Use a rectangle to multiply and solve the following problem.

$$\left(2x^2 + 5x + 4\right)\left(x - 6\right)$$

3. Skill 14: Factor a trinomial

$$28x^3 + 26x^2 + 6x$$

4.   Put into standard form then classify by degree and number of terms.

   a. $15x + 3 - x^3$

   b. $5b + x^2$

5. Add or subtract, then put answer in standard form.

$$(2x^2 + 7x) - (3x^2 - 4x + 2)$$

A1 S2 w6d2 8-8 Factoring 4 Terms + X-box 3

Week 6 Tuesday

CW: Notes/Practice 8-8   Factoring Polynomials With 4 Terms

1. What is the factored form of $3n^3 - 12n^2 + 2n - 8$?

2. What is the factored form of $8t^3 + 14t^2 + 20t + 35$?

3. Factor: $4q^4 - 8q^3 + 12q^2 - 24q$

Now you try: Factor each expression.

   a. $20r^3 + 8r^2 + 15r + 6$ b. $6d^3 + 3d^2 - 10d - 5$

   c. $24x^3 + 60x^2 + 36x + 90$ d. $6q^4 + 3q^3 - 24q^2 - 12q$

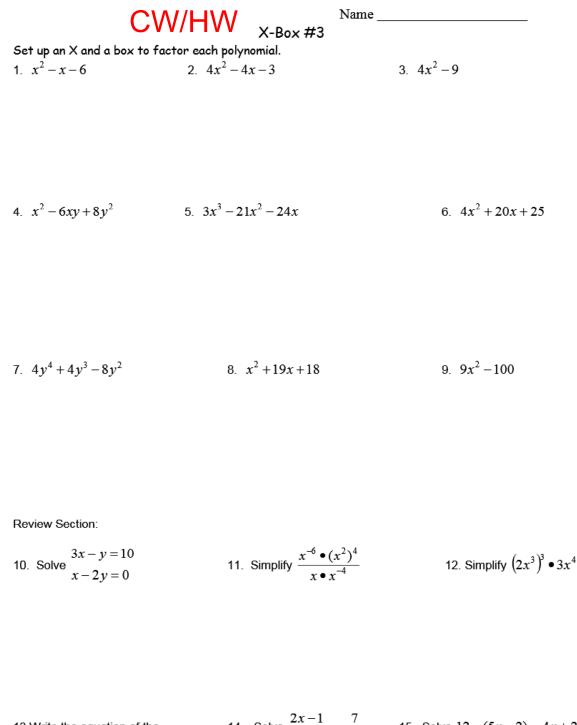# HW p 531: 13-17 all, 22-24 all & X-Box #3

Factor each expression.

13. $15q^3 + 40q^2 + 3q + 8$

14. $14y^3 + 8y^2 + 7y + 4$

15. $14z^3 - 35z^2 + 16z - 40$

16. $11w^3 - 9w^2 + 11w - 9$

17. $8m^3 + 12m^2 - 2m - 3$

18. $12k^3 - 27k^2 - 40k + 90$

Factor completely.

See Problem

22. $8p^3 - 32p^2 + 28p - 112$

23. $3w^4 - 2w^3 + 18w^2 - 12w$

24. $5g^4 - 5g^3 + 20g^2 - 20g$

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CW/HW X-Box #3

Name _____

Set up an X and a box to factor each polynomial.

1. $x^2 - x - 6$

2. $4x^2 - 4x - 3$

3. $4x^2 - 9$

4. $x^2 - 6xy + 8y^2$

5. $3x^3 - 21x^2 - 24x$

6. $4x^2 + 20x + 25$

7. $4y^4 + 4y^3 - 8y^2$

8. $x^2 + 19x + 18$

9. $9x^2 - 100$

Review Section:

10. Solve $\begin{array}{l} 3x - y = 10 \\ x - 2y = 0 \end{array}$

11. Simplify $\dfrac{x^{-6} \cdot (x^2)^4}{x \cdot x^{-4}}$

12. Simplify $(2x^3)^3 \cdot 3x^4$

13. Write the equation of the line that passes through (-2,4) and (6,8) .

14. Solve $\dfrac{2x-1}{x-5} = -\dfrac{7}{5}$

15. Solve $12 - (5x - 2) = 4x + 2(x - 1)$