

# A1 S2 w5d4 X-Box 2

## Alg 1 Week 5 Friday

## Warm Up

For each polynomial, factor the GCF out.

example:  $4x^3 - 22ax^2 + 18ax = 2x(2x^2 - 11ax + 9a)$

Try to do these by looking at them, not breaking them apart.

1.  $2x^2 - 14x + 26$

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

3.  $3x^4 + 12x^3 - 3x^2$

4.  $36ax^5 - 42x^3y - 48ax^3z^2$

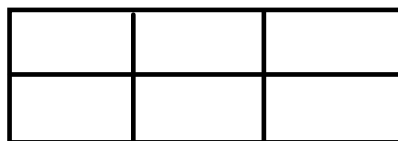
5.  $32x - 14x^2$

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

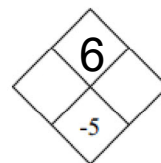
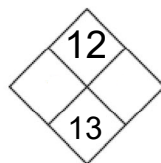
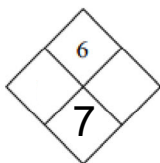
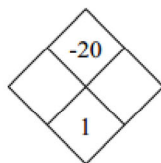
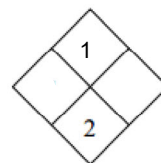
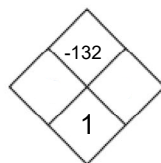
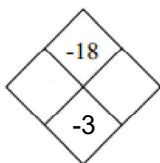
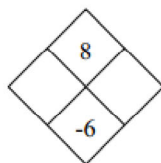
$$\frac{(5r \cdot r^{-2})^{-2} \cdot r}{(3r^{-1} \cdot r)^3}$$

7. Skill 13: Multiplying Polynomials: Use a rectangle to multiply the polynomials.

$$(2x - 5)(3x^2 + 4x - 6)$$



8. Fill in the "diamond" problems. Multiply to make the top, add to make the bottom.



## A1 S2 w5d4 X-Box 2

Alg1 Wk 4 Friday HW

**Let's Play X-Box #2!!!!**

Name \_\_\_\_\_

**Remember that Rule Number 1 in factoring is: Always factor out the GCF first! Use an X and a box to factor the following completely. Look for GCF first and don't forget it in your answer.**

\*1.  $2k^2 + 22k + 60$   
(hint: GCF?)

2.  $m^2 + 2m - 24$

\*3.  $-2n^2 - 5n - 2$

4.  $6x^2 + 37x + 6$

5.  $2p^2 + 2p - 4$

6.  $5x^2 + 19x + 12$

7.  $n^2 - 10n + 9$

8.  $3x^2 - 27$

\*9.  $x^2y + 4xy + 4y$

10.  $4n^2 - 17n + 4$

11.  $5v^2 - 30v + 40$

12.  $y^2 - 100$

13.  $10a^2 + 100a + 250$

\*14.  $200x^4 + 80x^3 + 8x^2$

15.  $a^2 + 11a + 18$