

Bell Work

3/23/2015

Please get out your assignment from Friday.

1. What is standard form?

When a polynomial is written from largest to smallest exponent.

2. What is a leading coefficient?

The # in front after in Standard form.

NAME: KEY

DATE: \_\_\_\_\_ HR: \_\_\_\_\_

# PRACTICE WITH POLYNOMIALS

Write each polynomial in standard form. Then, give the leading coefficient.

4.  $3x^2 - 2 + 4x^8 - x$

$4x^8 + 3x^2 - x - 2$

4  
2

5.  $7 - 50j + 3j^3 - 4j^2$

$3j^3 - 4j^2 - 50j + 7$

3

6.  $6k + 5k^4 - 4k^3 + 3k^2$

$5k^4 - 4k^3 + 3k^2 + 6k$

5

## ADD or SUBTRACT

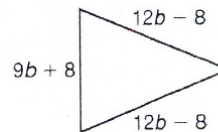
11.  $(-r^2 + 8pr - p) - (-12r^2 - 2pr + 8p)$

$11r^2 + 10pr - 9p$

12.  $(un - n^2 + 2un^3) - (3un^3 + n^2 + 4un)$

$-3un - 2n^2 - 8un^3$

13. Antoine is making a banner in the shape of a triangle. He wants to line the banner with a decorative border. How long will the border be?



$33b - 8$

## FIND THE PRODUCT

10.  $(2x + 5)(x + 6)$

$2x^2 + 17x + 30$

11.  $(m^3 - 3)(5m + n)$

$5m^3 + m^3n + 15m + 3n$

12.  $(a^2 + b^2)(a + b)$

$a^3 + a^2b + ab^2 + b^3$

13.  $(x + 4)(x^2 + 3x + 5)$

$x^3 + 7x^2 + 17x + 20$

14.  $(3m + 4)(m^2 - 3m + 5)$

$3m^3 - 5m^2 + 3m + 20$

15.  $(2x - 5)(4x^2 - 3x + 1)$

$8x^3 - 26x^2 + 17x - 5$

## FIND THE PRODUCT - LOOK FOR A PATTERN

16.  $(5x + 2)(5x - 2)$

$25x^2 - 4$

17.  $(10x + 7y)(10x - 7y)$

$100x^2 - 49y^2$

18.  $(x^2 + 3y)(x^2 - 3y)$

$x^4 - 9y^2$

19. Write a simplified expression that represents the...

a. area of the large rectangle.

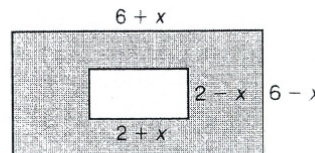
$36 - x^2$

b. area of the small rectangle.

$4 - x^2$

c. area of the shaded area.

$32$



$$x^2 + 5x + 4 = (x+1)(x+4)$$

	$x$	$1$
$x$	$x^2$	$1x$
$4$	$4x$	$4$

$$x^2 - 7x + 12$$

$$(x-4)(x-3)$$

$x$   
 $-3$

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

$$x^2 - 3x - 10$$

$$(x+2)(x-5)$$

	$x$	$-5$
$x$	$x^2$	$-5x$
$2$	$2x$	$-10$

$$x^2 - 13x + 12$$

$$(x-1)(x-12)$$

	$x$	$-12$
$x$	$x^2$	$-12x$
$-1$	$-1x$	$12$

$$x^2 - 16$$

$$(x-4)(x+4)$$

	$x$	$-4$
$x$	$x^2$	$-4x$
$4$	$4/x$	$-16$

$$x^2 - 12x + 35$$

 $x$  $-7$ 

$$(x-7)(x-5)$$

 $x$ 

$x^2$

$-7x$

 $-5$ 

$-5x$

$35$



$$2x^2 - 17x - 9$$

$$(2x+1)(x-9)$$

 $2x$  $1$ 

	$x$	$-9$
	$2x^2$	$-18x$
	$1x$	$-9$