(binomial)(binomial) #2

$(x-5)(x+4)$

$x^2+4x-5x-20$

COMBINE LIKE TERMS IN THE MIDDLE

x^2-x-20

(binomial)(binomial) #3

$(x-3)(x+3)$

$x^2 + 3x - 3x - 9$

CANCELS OUT

$x^2 - 9$

(binomial)(trinomial)

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

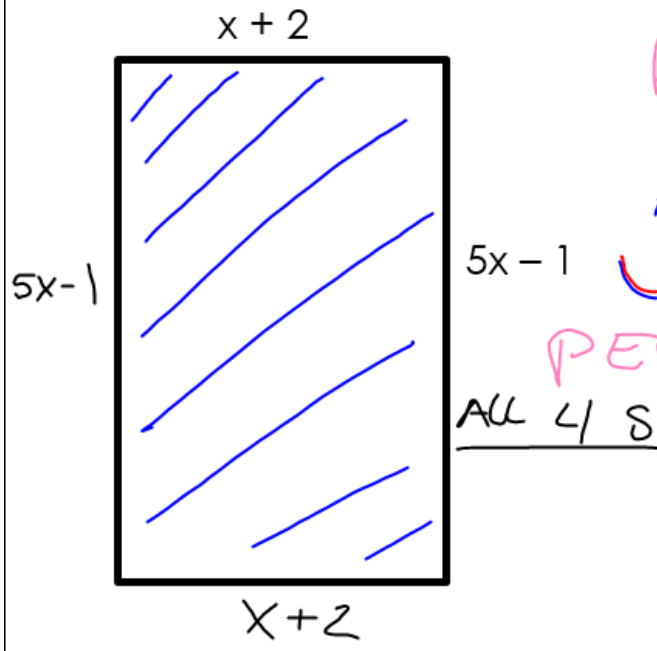
$x^3 - 4x^2 + 5x + 2x^2 - 8x + 10$

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

CHECK FOR LIKE TERMS

★ REMEMBER: WHEN COMBINING LIKE TERMS. DO NOT CHANGE THE EXPONENT

Find the perimeter and the area of the following rectangle



PERIMETER: AROUND THE OUTSIDE OF A SHAPE. ADD

AREA: INSIDE OF A SHAPE. MULTIPLY

PERIMETER

ALL 4 SIDES!

$X+2$
$5x-1$
$X+2$
$5x-1$

$P = 12x+2$

AREA ONLY 2 SIDES

$(x+2)(5x-1)$

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

$A = 5x^2 + 9x - 2$

11) $(4x^2-1)(8x-1)$

$32x^3-4x^2-8x+1$

12) $(7x-5)(3x+10)$

$21x^2+70x-15x-50$

$21x^2+55x-50$

9) $(6x+2)(2x^2-6x+1)$

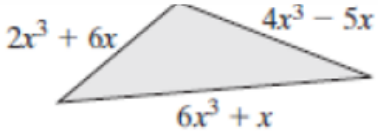
$12x^3-36x^2+6x+4x^2-12x+2$

$12x^3-32x^2-6x+2$

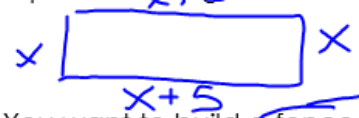
10) $(x-1)(x^3+2x^2+2)$

$x^4+2x^3+2x-1x^3-2x^2+2$

$x^4+1x^3-2x^2+2x-2$



5. A garden has a length that is 5 feet longer than its width. Draw and label picture that represents the garden



6. You want to build a fence around the garden to keep out rabbits. Write an expression that represents this.

PERIMETER

$x+5+x+x+5+x$ $\quad 4x+10$

7. You decide to lay down a layer of tarp before filling the garden with soil. Write an expression that would represent this. (Hint: Would it be perimeter, area or volume?)

$(x+5)(x)$ $\quad x^2+5x$

8. If x = 2, how much fencing will you need?

$4(2)+10$ (PERIMETER)

18 ft

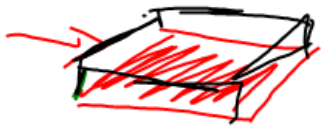
9. Again, if x = 2, how many square feet of tarp will you need?

$(2)^2+5(2) = 14\,ft^2$ AREA

10. You go to the store to buy soil. Assuming that your garden will be 1.5 ft. tall, how much soil should you buy? (Hint: Would it be perimeter, area or volume?)

FILL UP (3-DIMENSIONS)

$14\,ft^2$



BASE x h

14×1.5 $\quad 21\,ft^3$

Name:_____ Date:_____

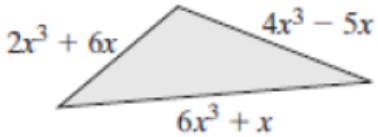
Writing polynomial expressions for Perimeter, Area and Volume

1. A square has a side length of 3x + 11. What is the perimeter of the square?

2. What is the area of the square?

3. If we used that same square as a base to make a cube, what is the volume of the cube?

4. Find the perimeter of the object shown



5. A garden has a length that is 5 feet longer than its width. Draw and label picture that represents the garden

6. You want to build a fence around the garden to keep out rabbits. Write an expression

Name:_____ Date:_____

Writing polynomial expressions for Perimeter, Area and Volume

1. A square has a side length of 3x + 11. What is the perimeter of the square?

$12x + 44$

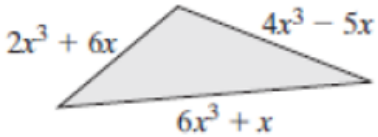
2. What is the area of the square?

$(3x+11)(3x+11)$

$9x^2+66x+121$

3. If we used that same square as a base to make a cube, what is the volume of the cube?

4. Find the perimeter of the object shown



$12x^3+2x$

5. A garden has a length that is 5 feet longer than its width. Draw and label picture that represents the garden

6. You want to build a fence around the garden to keep out rabbits. Write an expression