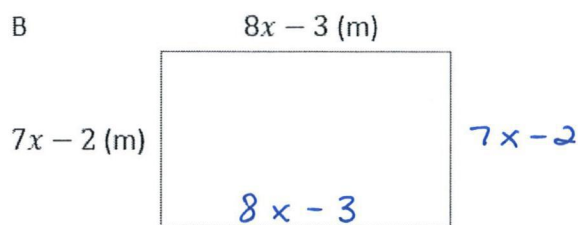
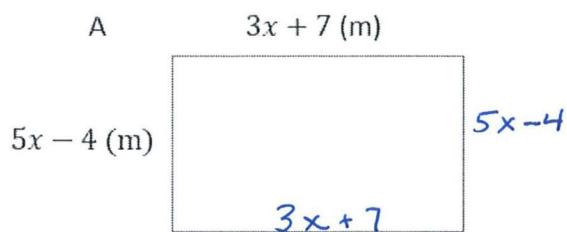


Notes: Add/Subtract/Multiply Polynomials

Name: _____

Consider the dimensions of Rectangle A and Rectangle B...



Adding Polynomials

Find the perimeter of rectangle: A $16x + 6(m)$

$$2(3x+7) + 2(5x-4)$$
$$6x + 14 + 10x - 8$$

Perimeter =

add up all 4 sides $16x + 6(m)$ B $30x - 10(m)$

$$2(8x-3) + 2(7x-2)$$

$$16x - 6 + 14x - 4$$

$$30x - 10$$

Multiplying Polynomials

Find the area of rectangle: A $15x^2 + 23x - 28$ B $56x^2 - 37x + 6$ Area = $l \cdot w$

$$(3x+7)(5x-4)$$

$$15x^2 - 12x + 35x - 28$$

$$15x^2 + 23x - 28$$

$$(7x-2)(8x-3)$$

$$56x^2 - 21x - 16x + 6$$

$$56x^2 - 37x + 6$$

Adding Polynomials

Find the sum of the perimeters of rectangles A and B: $(A + B)$

$46x - 4$

$$16x + 6 + 30x - 10$$

$$46x - 4$$

Subtracting Polynomials

Find the difference in the ^{perimeters} ~~area~~ of rectangle A and B: $(A - B)$ $-14x + 4$

$$16x - 6 - (30x - 10)$$

$$-14x + 4$$

If $x = 6$, find the area for rectangle:

A $23 \cdot 26 = 598 m^2$

B $45 \cdot 26 = 1,170 m^2$

$l: 3x + 7 \Rightarrow 3(6) + 7 = 23$

$l: 8x - 3 \Rightarrow 8(6) - 3 = 45$

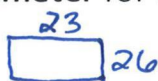
$w: 5x - 4 \Rightarrow 5(6) - 4 = 26$

$w: 5x - 4 \Rightarrow 5(6) - 4 = 26$

And the **perimeter** for rectangle:

A $23 + 23 + 26 + 26 = 98$ meters

B $45 + 45 + 26 + 26 = 142 m$



Simplify:

1. $(2x - 3) + (5x - 8) =$ _____

2. $(2x - 3)(5x - 8) =$ _____

3. $(4x + 3)(2x - 7) =$ _____

4. $(3x - 2) + (5x^2 - x + 4) =$ _____

$(3x^2 - 2x + 6) - (7x^2 - 2x - 10) =$ _____

Homework 4.4 – Add/Sub/Mult Polynomials

Simplify:

1. $(2x^2 + 3x - 5) + (7x^2 - 4x - 8)$

2. $(9x^2 - 3x + 4) - (2x^2 - 2x - 6)$

3. $(3x - 5)(6 - 7x)$

4. $-5x(x - 3)$

5. $(x - 8)(x - 2)$