

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**HW Section 5.2 Like terms and Unlike Terms**

1. Indicate whether if each of the following pairs are like terms or not:

a) $7a$ & $-15a$	b) $8xy$ & $3yx$	c) $9a$ & $6a^2$	d) $2ab$ & $13ba^2$	e) $7x^2$ & $7x^3$
f) $3cab^2$ & $-4ab^2c$	g) $8xy$ & $\frac{12}{xy}$	h) $15nm^2$ & $9mn^2$	i) $3^4zy^3$ & $3^2y^3z$	j) $8x^2$ & $3x(x)$

2. From the list of terms, indicate which ones are like terms with each other:

a) $\sqrt{9}$ , $9x^3$ , $8x$ , $22x^2$ , $12x$ , $15$	b) $\sqrt{3}x^2$ , $9x^3$ , $2x$ , $6x^2$ , $8x$
c) $12b^2$ , $8ab$ , $9b$ , $13ba$ , $\sqrt{2}b^2$	d) $5x^2$ , $\sqrt{7}yx$ , $12x^2$ , $\sqrt{3}xy$ , $\sqrt{2}x(3x)$

3. Simplify each of the following below:

<p>a)</p>	<p>b)</p>
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<p>c)</p>	<p>d)</p>
<p>e)</p>	<p>f)</p>

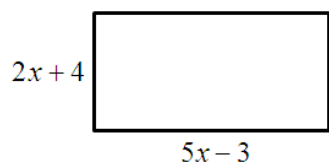
4. Simplify each of the following below:

a)  $-5k + 6k + 12k$

b)  $8y + 5z - 3y + 4z$

c) $5x^2 - 6x - 3x^2 + 14x$	d) $5x - 9y - 12 + 2x + 5y - 8$
e) $6m^2 - 5m + 9 + 2m^2 + 7 - 6m$	f) $4x^2y - 6xy^2 + 7xy - 12xy + 10xy^2 - 15x^2y$
g) $-5xy - 8xy^2 + 7yx - 12xy + 11xy^2 - 5x^2y$	h) $-8x^2y^3 - 6x^3y^2 + 9xy - 12yx + 13x^3y^2 - 15x^2y^3$

5. Write an expression for the perimeter of the figure below.



6. Determine the perimeter of the figure below.

