

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

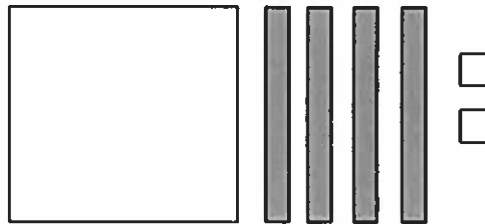
TOTAL = \_\_\_\_\_ /16

**UNIT 5 EXAM RE-WRITE**

**Polynomials**

*Use the following diagram to answer the next three questions.*

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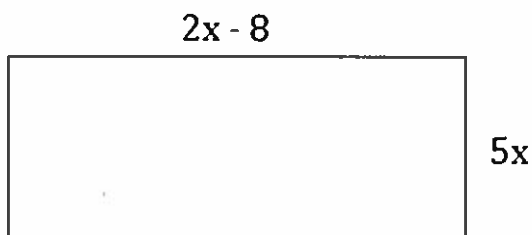


1) Write an expression for the polynomial represented by the tiles above. **(1)**

2) What is the degree of this polynomial? **(1)**

3) How many different terms does this polynomial consist of? **(1)**

4) Write a polynomial that represents the perimeter of the shape below. Simplify the polynomial. **(2)**



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- 5) Which of the following expressions are equivalent to the polynomial  $2x^2 - 16$ ?  
(circle one) (1)

$-2x^2 + 16$	$-16 + 2x^2$	$-16 - 2x^2$
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- 6) Which of the following pairs are NOT like terms? (circle one) (1)

x and -3	-3x and x	$10x^2$ and $-2x^2$
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- 7) Simplify each of the following expressions by combining like terms. (2)

a)  $2x + 5 + 8x^2 + 10x$

b)  $7 + 3x - 4x^3 - x + 12$

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8) A student determines the product of the expression  $2(-2x^3 + 2x)$  to be  $-4x^3 + 4x$ .  
Is the student correct? Explain. **(2)**

9) Simplify each of the following polynomials by adding or subtracting. **(2)**

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

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

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11) Simplify each of the following polynomials by multiplying or dividing. (3)

a)  $4(3x - 1)$

b)  $x(5x + 7)$

c)  $(-10x^2 + 12) \div 2$