Name:	Date:	
-------	-------	--

# **Chapter 5 Review**

#### **Key Words**

For #1 to #6, write the letter that best matches each description. You may use each letter more than once or not at all.

**A** 
$$-3x + 1$$

**B** 
$$-4d + 3$$

C 
$$1 - 3x^2$$

**4.** opposite polynomial to 
$$3x - 1$$

$$\mathbf{D} - \mathbf{w}$$

**E** 
$$x - 6y + 2$$

**F** 
$$-3x - 1$$

**G** 
$$3f-1$$

## 5.1 The Language of Mathematics, pages 242-250

monomial, binomial, trinomial, or polynomial

7. Complete the table.

Expression	Degree	Number of Terms	Type of Polynomial
<b>a)</b> $5 - p + px - p^2$			
<b>b)</b> 3f – 6			
<b>c)</b> -2a			
<b>d)</b> $3y^2 + 5xy - 27x^2 + 2$			

- a) What is the degree of the polynomial ab 7a + 3?
  - **b)** Explain how to find the degree of a term.
  - c) Explain how to find the degree of a polynomial.
- **9.** Draw algebra tiles to model the expression  $3x^2 2x + 1$ .

Name:	Date:

10. What expression does each model show?





11. Used videos cost \$10. Used books cost \$4. The expression 10v + 4b describes the value of sales.

<b>AL</b> What does the variable v stand lot?	a)	What does the variable <i>v</i> stand for?	
---	----	--	--

- **b)** What does the variable *b* stand for?
- c) How much money would you receive if you sold 6 video games and 11 books?

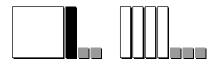
Sentence:			

#### 5.2 Equivalent Expressions, pages 252–261

**12.** Complete the table.

Expression	Coefficient	Variable(s)	Exponent(s) of the Variable(s)
$a) 8xy^2$			
<b>b)</b> $-c^2$			

- 13. Circle the like terms:  $-2x^2$  3xy  $x^2$  5.3y 2
- 14. a) The diagram shows an expression. Redraw the tiles so like terms are together.



- b) Write an expression for the simplified answer.
- **276** MHR Chapter 5: Introduction to Polynomials

15. Combine like terms to simplify the expressions. Draw tiles or use symbols.

a) 3-2x+1+5x

**b)** 1-c+4+2c-3+6c

- **16.** The perimeter of a shape is (4x) + (3x 1) + (x + 3) + (x 2). Each part in brackets is the length of one side.
  - a) Draw and label a shape for this expression.



**b)** Simplify the expression for the perimeter.

## 5.3 Adding and Subtracting Polynomials, pages 263-273

17. What is the opposite of each polynomial?

**a)** 
$$7 - a \rightarrow$$
\_\_\_\_\_

**b)** 
$$x^2 - 2x + 4 \rightarrow$$

**18.** 
$$(3x^2 + 4x - 9) + (2 - 5x - x^2)$$

- a) Find the sum using algebra tiles.
- **b)** Find the sum using symbols.

**19.** Combine like terms.

a) 
$$(-p+7)+(4p-5)$$

Add the opposite.

**b)** 
$$(a^2 - a - 2) - (5 - 3a^2 + 6a)$$