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

BLM 5-11

## **Chapter 5 Test**

For #1 to 4, choose the best answer.

**1.** Let represent  $+x^2$ , represent -x, represent +1, represent +x, and represent -1. Which diagram represents the expression  $x^2 - 3x + 2$ ?



2. Which expression is an example of a polynomial with a degree of 2?

<b>A</b> 2 <i>x</i>	<b>B</b> 4 – 3 <i>x</i>
<b>C</b> 3 <i>xy</i> + 5 <i>x</i>	<b>D</b> $x^2y + 3x + 7$

**3.** Which expression can be classified as a trinomial?

<b>A</b> $x^2y + xy^2 + x + y$	$\mathbf{B} x + y$
<b>C</b> $5x^3 + 7$	<b>D</b> 3 <i>x</i>

**4.** Devin was asked to subtract the expressions 5x - 7 and -2x + 6. His work is shown below.

+z

(5x - 7) - (-2x + 6)	Step 1
= 5x - 7 + 2x + 6	Step 2
= 5x + 2x - 7 + 6	Step 3
= 7x - 1	Step 4

In which Step did Devin make his first mistake?

A Step 1	<b>B</b> Step 2
<b>C</b> Step 3	<b>D</b> Step 4

Complete the statements in #5 to 7.

- **5.** The degree of the constant term 6 is \_\_\_\_\_.
- **6.** The coefficient of the term *x* is \_\_\_\_\_.

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**7.** In the monomial  $-5x^2$ , the variable is \_\_\_\_\_.

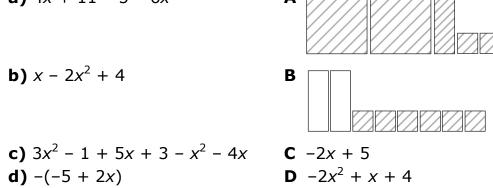
## **Short Answer**

For #8 and 9, use the same key for the diagrams as was used in #1.

**8.** Write an expression that can be represented by the diagram shown.



**9.** Match each expression on the left with its equivalent expression or model. **a)** 4x + 11 - 5 - 6x **A** 



**10.** For the expression  $(2x^2 - 3x + 1) + (-x^2 + 5x + 2)$ , draw a model to represent sum of the two polynomials. Then, express the sum symbolically.

## **Extended Response**

- **11.** Jared wants to have his birthday party at the movies. The special event price of a movie ticket is \$8.50 plus \$4 for popcorn and a drink. The cost to rent the party room after the movie is \$50 plus \$5 per person for pop and cake.
  - **a)** Write an expression to represent the cost of movie tickets with popcorn and a drink.
  - **b)** Write an expression to represent the cost of renting the party room and having pop and cake.
  - **c)** What is the simplified expression for the total cost of Jared's birthday party?
  - **d)** How much would it cost for Jared's birthday at the movies, including the party room, for Jared and five friends?