Determining Elements   
 in Linear Patterns

**Algebra   
Unit 1 Line Master 5a**

Choose two of these four patterns and answer the questions.

|  |  |
| --- | --- |
| A.  The term value is the number of toothpicks. | B.  This number pattern starts with term 0  −10, −7, −4, −1, 2, … |
| C.   |  |  | | --- | --- | | *x* | *y* | | 1 | 3.5 | | 2 | 6 | | 3 | 8.5 | | 4 | 11 | | 5 | 13.5 | | D. |

Determining Elements   
 in Linear Patterns (cont’d)

**Algebra   
Unit 1 Line Master 5b**

My first pattern is \_\_\_\_\_.

1. Write an equation to describe this pattern.

Explain how you wrote it.

2. What is the value of term 8? Show your work.

3. What is the value of term 15? Show your work.

4. What is the number of the term with a value of 41?

Explain how you know.

Determining Elements   
 in Linear Patterns (cont’d)

**Algebra   
Unit 1 Line Master 5c**

My second pattern is \_\_\_\_\_.

5. Write an equation to describe this pattern.

Explain how you wrote it.

6. What is the value of term 8? Show your work.

7. What is the value of term 15? Show your work.

8. What is the number of the term with a value of 41?   
Explain how you know.