***Coding Practice with
 Algebraic Expressions* Answers**

**Algebra**

**Unit 1 Line Master 4c**

1. Match the code on the left to the correct output on the right.
Then describe the output.

|  |  |
| --- | --- |
| **Code** | **Output** |
| a) Matches Output A, B, or C? (circle one)for i in range (1,5): termNumber = i termValue = 5 \* termNumber print (termNumber, '\t', termValue)What is the numerical coefficient, or multiplier? **5**What is the constant? **No constant**What is the algebraic expression? **5*n***  |

|  |  |
| --- | --- |
| **0** | **1** |
| **1** | **4** |
| **2** | **7** |
| **3** | **10** |
| **4** | **13** |
| **5** | **16** |
| **6** | **19** |
| **7** | **22** |
| **8** | **25** |
| **9** | **28** |

**A** |
| b) Matches Output A, B, or C? (circle one)for i in range (0,5): termNumber = i termValue = 5 \* termNumber + 2 print (termNumber, '\t', termValue)What is the numerical coefficient, or multiplier? **5**What is the constant? **2**What is the algebraic expression? **5*n* + 2**  | **B**

|  |  |
| --- | --- |
| **1** | **5** |
| **2** | **10** |
| **3** | **15** |
| **4** | **20** |

 |
| c) Matches Output A, B, or C? (circle one)for i in range (0,10): termNumber = i termValue = 3 \* termNumber + 1 print (termNumber, '\t', termValue)What is the numerical coefficient, or multiplier? **3**What is the constant? **1**What is the algebraic expression? **3*n* + 1**   | **C**

|  |  |
| --- | --- |
| **0** | **2** |
| **1** | **7** |
| **2** | **12** |
| **3** | **17** |
| **4** | **22** |

 |

 ***Coding Practice with
 Algebraic Expressions* Answers** (cont’d)

**Algebra**

**Unit 1 Line Master 4d**

2. This code produces the output shown.

|  |  |
| --- | --- |
| **Code** | **Output** |
| for i in range (1,11): termNumber = i termValue = 4 \* termNumber + 1 print (termNumber, '\t', termValue) |

|  |  |
| --- | --- |
| **1** | **5** |
| **2** | **9** |
| **3** | **13** |
| **4** | **17** |
| **5** | **21** |
| **6** | **25** |
| **7** | **29** |
| **8** | **33** |
| **9** | **37** |
| **10** | **41** |

 |

How would you alter the code to generate this output?

**Altered Code**

for i in range (1,11):

 termNumber = i

 termValue = 7 \* termNumber + 1

 print (termNumber, '\t', termValue)

|  |  |
| --- | --- |
| **1** | **8** |
| **2** | **15** |
| **3** | **22** |
| **4** | **29** |
| **5** | **36** |
| **6** | **43** |
| **7** | **50** |
| **8** | **57** |
| **9** | **64** |
| **10** | **71** |

3. Predict the output when this code is executed.

**Code:**

for i in range (0,11):

 termNumber = i

 termValue = 10 \* termNumber + 3

 print (termNumber, '\t', termValue)

 ***Coding Practice with
 Algebraic Expressions* Answers** (cont’d)

**Algebra**

**Unit 1 Line Master 4e**

**Sample Output**

|  |  |
| --- | --- |
| **0** | **3** |
| **1** | **13** |
| **2** | **23** |
| **3** | **33** |
| **4** | **43** |
| **5** | **53** |
| **6** | **63** |
| **7** | **73** |
| **8** | **83** |
| **9** | **93** |
| **10** | **103** |