Keystone Algebra 1

Number Pattern

Handscoring
Anchor Set
16. A number pattern is shown below.

| row 1 | 1 |
| row 2 | 4  | 7 |
| row 3 | 10 | 13 | 16 |
| row 4 | 19 | 22 | 25 | 28 |

The pattern continues.

**A.** What is the difference between the last number in row 5 and the first number in row 5?

difference: ________________________________

**B.** Write an equation that can be used to find $d$, the difference between the last number and the first number, for any row $r$.

d = ________________________________
PA Keystone Algebra 1: Number Pattern

16. **Continued.** Please refer to the previous page for task explanation.

C. What is the first number in row 8?

first number: ______________________

D. What is the last number in row 8?

last number: _____________________
Keystone Algebra 1
Number Pattern

Assessment Anchor this item will be reported under:
A1.2.1 Functions
Specific Eligible Content addressed by this item:
A1.2.1.1 Analyze a set of data for the existence of a pattern and represent the pattern algebraically and/or graphically.

Scoring Guide:

<table>
<thead>
<tr>
<th>Score</th>
<th>In this item, the student –</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Demonstrates a thorough understanding of analyzing and/or using patterns or relations by correctly solving problems and clearly explaining procedures.</td>
</tr>
<tr>
<td>3</td>
<td>Demonstrates a general understanding of analyzing and/or using patterns or relations by correctly solving problems and clearly explaining procedures with only minor errors or omissions.</td>
</tr>
<tr>
<td>2</td>
<td>Demonstrates a partial understanding of analyzing and/or using patterns or relations by correctly performing a significant portion of the required task.</td>
</tr>
<tr>
<td>1</td>
<td>Demonstrates minimal understanding of analyzing and/or using patterns or relations</td>
</tr>
<tr>
<td>0</td>
<td>The response has no correct answer and insufficient evidence to demonstrate any understanding of the mathematical concepts and procedures as required by the task. Response may show only information copied from the question.</td>
</tr>
</tbody>
</table>

Non-scorables
B – Blank, entirely erased or written refusal to respond
F – Foreign Language
K – Off-task
U – Unreadable

Top Scoring Student Response And Training Notes:

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Student earns 4 points.</td>
</tr>
<tr>
<td>3</td>
<td>Student earns 3 points.</td>
</tr>
<tr>
<td>2</td>
<td>Student earns 2 points.</td>
</tr>
<tr>
<td>1</td>
<td>Student earns 1 point.</td>
</tr>
<tr>
<td>0</td>
<td>Response is incorrect or contains some correct work that is irrelevant to the skill or concept being measured.</td>
</tr>
</tbody>
</table>
PA Keystone Algebra 1: Number Pattern

A.

<table>
<thead>
<tr>
<th>What?</th>
<th>Why?</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

(1 score point)
1 point for correct answer

B.

<table>
<thead>
<tr>
<th>What?</th>
<th>Why?</th>
</tr>
</thead>
<tbody>
<tr>
<td>$3(r - 1)$ OR $d = 3(r - 1)$ OR equivalent</td>
<td></td>
</tr>
</tbody>
</table>

(1 score point)
1 point for correct answer

C.

<table>
<thead>
<tr>
<th>What?</th>
<th>Why?</th>
</tr>
</thead>
<tbody>
<tr>
<td>85</td>
<td></td>
</tr>
</tbody>
</table>

(1 score point)
1 point for correct answer

D.

<table>
<thead>
<tr>
<th>What?</th>
<th>Why?</th>
</tr>
</thead>
<tbody>
<tr>
<td>106</td>
<td></td>
</tr>
</tbody>
</table>

(1 score point)
1 point for correct answer
A number pattern is shown below.

<table>
<thead>
<tr>
<th>row 1</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>row 2</td>
<td>4</td>
</tr>
<tr>
<td>row 3</td>
<td>10</td>
</tr>
<tr>
<td>row 4</td>
<td>19</td>
</tr>
</tbody>
</table>

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

\[d = 3r - 3\]

B. Write an equation that can be used to find \(d\), the difference between the last number and the first number, for any row \(r\).

C. What is the first number in row 8?

D. What is the last number in row 8?

4

A. 1 point – correct answer.
B. 1 point – correct answer (OK to repeat “\(d = 3r - 3\)” within the answer box).
C. 1 point – correct answer.
D. 1 point – correct answer.
A number pattern is shown below.

| row 1 | 1 |
| row 2 | 4 | 7 |
| row 3 | 10 | 13 | 16 |
| row 4 | 19 | 22 | 25 | 28 |

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

\[ 45 - 31 = 12 \]

11/59

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

\[ d = 3(r - 1) \]

8/59

C. What is the first number in row 8?

95

2/59

D. What is the last number in row 8?

106

3/59

4 A. 1 point – correct answer.
B. 1 point – correct answer.
C. 1 point – correct answer.
D. 1 point – correct answer.
A number pattern is shown below.

\[
\begin{array}{c c c c}
\text{row 1} & 1 \\
\text{row 2} & 4 & 7 \\
\text{row 3} & 10 & 13 & 16 \\
\text{row 4} & 19 & 22 & 25 & 28 \\
\end{array}
\]

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

\[
\text{difference: 12}
\]

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

\[
d = 43 - 31
\]

C. What is the first number in row 8?

\[
\text{first number: 88}
\]

D. What is the last number in row 8?

\[
\text{last number: 106}
\]

3  A. 1 point – correct answer. 
    B. 0 points – incorrect answer. 
    C. 1 point – correct answer. 
    D. 1 point – correct answer.
A number pattern is shown below.

<table>
<thead>
<tr>
<th>row 1</th>
<th>row 2</th>
<th>row 3</th>
<th>row 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
<td>10</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>13</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>16</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>28</td>
</tr>
</tbody>
</table>

The pattern continues.

---

A. What is the difference between the last number in row 5 and the first number in row 5?

\[ \text{difference} = 12 \]

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

\[ d = 3r \]

C. What is the first number in row 8?

\[ \text{first number} = 85 \]

D. What is the last number in row 8?

\[ \text{last number} = 108 \]

---

3. A. 1 point – correct answer.
   B. 0 points – incorrect answer.
   C. 1 point – correct answer.
   D. 1 point – correct answer.
16. A number pattern is shown below.

<table>
<thead>
<tr>
<th>row 1</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>row 2</td>
<td>4  7</td>
</tr>
<tr>
<td>row 3</td>
<td>10 13 16</td>
</tr>
<tr>
<td>row 4</td>
<td>19 22 25 28</td>
</tr>
</tbody>
</table>

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

difference: 12

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

\[ d = \]
16. **Continued.** Please refer to the previous page for task explanation.

C. What is the first number in row 8?

first number: 85

D. What is the last number in row 8?

last number: 109
16. A number pattern is shown below.

| row 1 |    |
| row 2 | 4  7 |
| row 3 | 10 13 16 |
| row 4 | 19 22 25 28 |

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

difference: 3

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

\[ d = r + 3 \]
16. **Continued.** Please refer to the previous page for task explanation.

<table>
<thead>
<tr>
<th></th>
<th>85</th>
</tr>
</thead>
<tbody>
<tr>
<td>43</td>
<td>41</td>
</tr>
<tr>
<td>82</td>
<td>106</td>
</tr>
</tbody>
</table>

C. What is the first number in row 8?

first number: 85

D. What is the last number in row 8?

last number: 106
16. A number pattern is shown below.

\[
\begin{array}{cccccc}
\text{row 1} & 1 \\
\text{row 2} & 4 & 7 \\
\text{row 3} & 10 & 13 & 16 \\
\text{row 4} & 19 & 22 & 25 & 28 \\
\end{array}
\]

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

\[
\begin{array}{cccccc}
1 & 4 & 7 \\
10 & 13 & 16 \\
19 & 22 & 25 & 28 \\
21 & 24 & 27 & 30 & 33 \\
36 & 39 & u2 & u5 & u8 & u11 \\
\end{array}
\]

difference: 12

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

\[ d = 3d - 3 \]

1 A. 1 point – correct answer.
B. 0 points – incorrect answer (using any variable other than \( d \) for the row would be acceptable).
C. 0 points – incorrect answer.
D. 0 points – incorrect answer.
16. Continued. Please refer to the previous page for task explanation.

C. What is the first number in row 8?

first number: 75

D. What is the last number in row 8?

last number: 96
16. A number pattern is shown below.

| row 1 |  1  |
| row 2 |  4  |  7  |
| row 3 | 10  | 13  | 16  |
| row 4 | 19  | 22  | 25  | 28  |

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

\[ \text{difference: } \underline{\text{it is less than}} \]

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

\[ d = \frac{6}{2} \]

1. A. 0 points – incorrect answer.
   B. 0 points – incorrect answer.
   C. 1 point – correct answer.
   D. 0 points – incorrect answer.
16. *Continued.* Please refer to the previous page for task explanation.

C. What is the first number in row 8?

first number: 85

D. What is the last number in row 8?

last number: 16
A number pattern is shown below.

<table>
<thead>
<tr>
<th>row 1</th>
<th>row 2</th>
<th>row 3</th>
<th>row 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.4</td>
<td>10</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>28</td>
</tr>
</tbody>
</table>

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

\[
d = 9\]

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

\[
d = 10 - 28\]

C. What is the first number in row 8?

\[
\text{first number} = 22\]

D. What is the last number in row 8?

\[
\text{last number} = 28\]

0

A. 0 points – incorrect answer.
B. 0 points – incorrect answer.
C. 0 points – incorrect answer.
D. 0 points – incorrect answer.
A number pattern is shown below.

<table>
<thead>
<tr>
<th>row 1</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>row 2</td>
<td>4</td>
</tr>
<tr>
<td>row 3</td>
<td>10</td>
</tr>
<tr>
<td>row 4</td>
<td>19</td>
</tr>
</tbody>
</table>

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

\[
\text{difference: } 3 \\
1/50
\]

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

\[
d = r + 3 \\
3/50
\]

C. What is the first number in row 8?

\[
\text{first number: } 21 \\
2/50
\]

D. What is the last number in row 8?

\[
\text{last number: } 24 \\
2/50
\]

0 A. 0 points – incorrect answer. 
B. 0 points – incorrect answer. 
C. 0 points – incorrect answer. 
D. 0 points – incorrect answer.
Keystone Algebra 1

Number Pattern

Handscoring
Training Set 1
This Page Intentionally Blank
16. A number pattern is shown below.

\[
\begin{array}{llll}
\text{row 1} & 1 \\
\text{row 2} & 4 & 7 \\
\text{row 3} & 10 & 13 & 16 \\
\text{row 4} & 19 & 22 & 25 & 28 \\
\end{array}
\]

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

Difference:  \[ \_ \_ \_ \_ \_ \_ \]

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

\[ d = (r_5 - r_1) \]
16. Continued. Please refer to the previous page for task explanation.

C. What is the first number in row 8?

19 22 25 28
31 34 37 40 43
46 49 52 55 58 61
64 67 70 73 76 79 82
85 88 91 94 97 100 103 106

first number: __85__

D. What is the last number in row 8?

last number: __106__
16. A number pattern is shown below.

row 1       1
row 2       4    7
row 3       10   13   16
row 4       19   22   25   28

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

\[28 - 19 = 9\]

\[\text{difference: } 9\]

B. Write an equation that can be used to find \(d\), the difference between the last number and the first number, for any row \(r\).

\[f - r_{\text{last}} = d\]

\[f - r_{\text{first}} = d\]

\[d = \frac{f - 1}{r}\]
16. *Continued.* Please refer to the previous page for task explanation.

C. What is the first number in row 8?

First number: 10

D. What is the last number in row 8?

Last number: 4
16. A number pattern is shown below.

<table>
<thead>
<tr>
<th>row 1</th>
<th>row 2</th>
<th>row 3</th>
<th>row 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>28</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The pattern continues,

331  340  40  43

A. What is the difference between the last number in row 5 and the first number in row 5?

\[ \text{difference: } 12 \]

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

\[ x = \text{first number} \]
\[ y_r = \text{last number} \]
\[ d = x - y_r \]
16. *Continued.* Please refer to the previous page for task explanation.

<table>
<thead>
<tr>
<th>Row</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>31</td>
</tr>
<tr>
<td>6</td>
<td>46</td>
</tr>
<tr>
<td>7</td>
<td>64</td>
</tr>
<tr>
<td>8</td>
<td>85</td>
</tr>
</tbody>
</table>

**First number:** 85

<table>
<thead>
<tr>
<th>Row</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>43</td>
</tr>
<tr>
<td>6</td>
<td>61</td>
</tr>
<tr>
<td>7</td>
<td>82</td>
</tr>
<tr>
<td>8</td>
<td>166</td>
</tr>
</tbody>
</table>

**Last number:** 166
A number pattern is shown below.

<table>
<thead>
<tr>
<th>row 1</th>
<th>row 2</th>
<th>row 3</th>
<th>row 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>22</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>28</td>
</tr>
</tbody>
</table>

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

<table>
<thead>
<tr>
<th>difference: 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>d = 2(r - 1)</td>
</tr>
</tbody>
</table>

B. Write an equation that can be used to find d, the difference between the last number and the first number, for any row r.

<table>
<thead>
<tr>
<th>d = 2(r - 1)</th>
</tr>
</thead>
</table>

C. What is the first number in row 8?

<table>
<thead>
<tr>
<th>first number: 64</th>
</tr>
</thead>
</table>

D. What is the last number in row 8?

<table>
<thead>
<tr>
<th>last number: 105</th>
</tr>
</thead>
</table>
16. A number pattern is shown below.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>row 1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>row 2</td>
<td>4 7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>row 3</td>
<td>10 13 16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>row 4</td>
<td>19 22 25 28</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

\[
\begin{align*}
\text{difference:} & \quad \underline{9} \\
15 & \quad 18 \\
21 & \quad 24 \\
\end{align*}
\]

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

\[d = \frac{0 + 4 + \delta}{\alpha + \beta + \gamma} \]

\[d = \frac{\delta + \theta}{\alpha + \beta} \]
16. *Continued.* Please refer to the previous page for task explanation.

C. What is the first number in row 8?

\[
\begin{align*}
14 + 3 &= 2k \\
23 + 3 &= 2S \\
25 + 3 &= 25 \\
28 + 3 &= 31
\end{align*}
\]

First number: \(31\)

D. What is the last number in row 8?

\[
\begin{align*}
28 + 15 &= 43 \\
43 + 15 &= 68 \\
61 + 21 &= 82 \\
82 + 2Y &= 106
\end{align*}
\]

Last number: \(106\)
A number pattern is shown below.

<table>
<thead>
<tr>
<th>row 1</th>
<th>row 2</th>
<th>row 3</th>
<th>row 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>22</td>
<td>25</td>
</tr>
</tbody>
</table>

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

<table>
<thead>
<tr>
<th>difference:</th>
<th>there is no row 5</th>
</tr>
</thead>
</table>

17 / 50

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

| \[ d = \frac{m_2 - m_1}{2} = \frac{22 - 19}{2} = \frac{3}{3} \] |

9 / 50

C. What is the first number in row 8?

| first number: | 28 |

2 / 50

D. What is the last number in row 8?

| last number: | 10 |

2 / 50
16. A number pattern is shown below.

row 1: 1
row 2: 4  7
row 3: 10  13  16
row 4: 19  22  25  28

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

31  34  37  40  43

difference: 12

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

\[ \text{goes up a multiple of 3 every time} \]

\[ \text{row 1} = 3 \]
\[ \text{row 2} = 6 \]
\[ \text{row 3} = 9 \]

\[ d = \frac{3r+1}{2} \]
16. Continued. Please refer to the previous page for task explanation.

C. What is the first number in row 8?

<table>
<thead>
<tr>
<th>81</th>
<th>34</th>
<th>37</th>
<th>40</th>
<th>43</th>
</tr>
</thead>
<tbody>
<tr>
<td>46</td>
<td>59</td>
<td>52</td>
<td>55</td>
<td>58</td>
</tr>
<tr>
<td>64</td>
<td>67</td>
<td>70</td>
<td>73</td>
<td>76</td>
</tr>
<tr>
<td>79</td>
<td>82</td>
<td>85</td>
<td>88</td>
<td>91</td>
</tr>
<tr>
<td>94</td>
<td>97</td>
<td>100</td>
<td>103</td>
<td>106</td>
</tr>
</tbody>
</table>

first number: 85

D. What is the last number in row 8?

last number: 106
16. A number pattern is shown below.

| row 1 | 1   |
| row 2 | 4   7 |
| row 3 | 10  13 16 |
| row 4 | 19  22  25  28 |

The pattern continues.  

| 21  | 34  | 47  | 50  | 53  |

A. What is the difference between the last number in row 5 and the first number in row 5?

\[ d = 43 - 31 \]

\[ d = 12 \]

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

\[ d = 3r - 3 \]
16. **Continued.** Please refer to the previous page for task explanation.

C. What is the first number in row 8?

First number: 85

D. What is the last number in row 8?

Last number: 106
A number pattern is shown below.

<table>
<thead>
<tr>
<th>row 1</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>row 2</td>
<td>4 7</td>
</tr>
<tr>
<td>row 3</td>
<td>10 13 15</td>
</tr>
<tr>
<td>row 4</td>
<td>19 22 25 28</td>
</tr>
</tbody>
</table>

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

\[
\text{difference: the first is 31, the last is 43}
\]

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

\[
d = \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \ quad
A number pattern is shown below.

<table>
<thead>
<tr>
<th>row 1</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>row 2</td>
<td>4</td>
</tr>
<tr>
<td>row 3</td>
<td>10</td>
</tr>
<tr>
<td>row 4</td>
<td>19</td>
</tr>
</tbody>
</table>

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

difference: 12

2/50

B. Write an equation that can be used to find $d$, the difference between the last number and the first number, for any row $r$.

$d = \frac{\text{last#} - \text{first#}}{r-1}$

14/50

C. What is the first number in row 8?

first number: 57

2/50

D. What is the last number in row 8?

last number: 70

2/50
Subject: Algebra 1       Item: Number Pattern

Name __________________________

<table>
<thead>
<tr>
<th>Number</th>
<th>Score</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1-7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1-8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1-9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1-10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This Page Intentionally Blank
Keystone Algebra 1

Number Pattern

Handscoring Training Set 2
This Page Intentionally Blank
A number pattern is shown below.

row 1
row 2
row 3
row 4

1
4
10
19

7
13
16
22
25
28

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

C. What is the first number in row 8?

D. What is the last number in row 8?
A number pattern is shown below.

<table>
<thead>
<tr>
<th>row 1</th>
<th>row 2</th>
<th>row 3</th>
<th>row 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>19</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>22</td>
</tr>
</tbody>
</table>

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

\[ d = 3r - 3 \]

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

C. What is the first number in row 8?

D. What is the last number in row 8?
A number pattern is shown below.

<table>
<thead>
<tr>
<th>row 1</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>row 2</td>
<td>4</td>
</tr>
<tr>
<td>row 3</td>
<td>13</td>
</tr>
<tr>
<td>row 4</td>
<td>19</td>
</tr>
</tbody>
</table>

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

<table>
<thead>
<tr>
<th>difference:</th>
</tr>
</thead>
</table>

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

\[ d = 3r - 3 \]

C. What is the first number in row 8?

<table>
<thead>
<tr>
<th>first number:</th>
</tr>
</thead>
</table>

D. What is the last number in row 8?

<table>
<thead>
<tr>
<th>last number:</th>
</tr>
</thead>
</table>
A number pattern is shown below.

\[
\begin{array}{c|cccc}
\text{row 1} & 1 \\
\text{row 2} & 4 & 7 \\
\text{row 3} & 10 & 13 & 16 \\
\text{row 4} & 19 & 22 & 25 & 26 \\
\end{array}
\]

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

\[
\begin{array}{c}
\text{difference:} \\
\end{array}
\]

B. Write an equation that can be used to find \(d\), the difference between the last number and the first number, for any row \(r\).

\[
\begin{array}{c}
d = 19r - 1 + 16 \\
\end{array}
\]

C. What is the first number in row 8?

\[
\begin{array}{c}
\text{first number:} \\
\end{array}
\]

D. What is the last number in row 8?

\[
\begin{array}{c}
\text{last number:} \\
\end{array}
\]
16. A number pattern is shown below.

row 1
row 2
row 3
row 4

1 4 7 10 13 16 19 22 25 28

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

\[
\begin{array}{c}
31 \\
34 \\
37 \\
40 \\
43 \\
\end{array}
\]

\[
\begin{array}{c}
43 \\
-31 \\
\hline
12 \\
\end{array}
\]

difference: \(9\)
16. Continued. Please refer to the previous page for task explanation.

C. What is the first number in row 8?

\[
\begin{align*}
\text{(1)} & : 1 \\
\text{(2)} & : 4 \quad 7 \\
\text{(3)} & : 10 \quad 13 \quad 16 \\
\text{(4)} & : 19 \quad 22 \quad 25 \quad 28 \\
\text{(5)} & : 31 \quad 34 \quad 37 \quad 40 \quad 43 \\
\text{(6)} & : 44 \quad 49 \quad 52 \quad 55 \quad 58 \quad 61 \\
\text{(7)} & : 64 \quad 67 \quad 70 \quad 73 \quad 76 \quad 79 \quad 82 \\
\text{(8)} & : 85 \quad 88 \quad 91 \quad 94 \quad 97 \quad 100 \quad 103 \quad 106 \\
\end{align*}
\]

First number: **eighty-five (85)**

D. What is the last number in row 8?

\[
\begin{align*}
\text{Row 8 Numbers} & : 85 \quad 88 \quad 91 \quad 94 \quad 97 \quad 100 \quad 103 \quad 106 \\
\end{align*}
\]

Last number: **hundred six (106)**
16. A number pattern is shown below.

row 1
row 2
row 3
row 4

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

\[
\begin{align*}
\text{first} & \quad \# \text{ in} \\
\text{row 5} & \quad \underline{31} \\
\text{last} & \quad \# \text{ in} \\
\text{row 5} & \quad \underline{43} \\
\text{difference:} & \quad \underline{-12}
\end{align*}
\]

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

\[ d = Y - X \]
16. **Continued.** Please refer to the previous page for task explanation.

C. What is the first number in row 8?

first number: \( 80 \)

D. What is the last number in row 8?

last number: \( 106 \)
A number pattern is shown below.

```
row 1  1
row 2  4  7
row 3 10 13 16
row 4 19 22 25 28
```

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

\[
\begin{align*}
\text{difference:} & \quad 43 - 31 = 12 \\
0 / 50 & \quad \\
\end{align*}
\]

B. Write an equation that can be used to find \(d\), the difference between the last number and the first number, for any row \(r\).

\[
\begin{align*}
d & = \text{the first number - the last number.} \\
34 / 50 & \\
\end{align*}
\]

C. What is the first number in row 8?

\[
\begin{align*}
\text{first number:} & \quad 85 \\
2 / 50 & \\
\end{align*}
\]

D. What is the last number in row 8?

\[
\begin{align*}
\text{last number:} & \quad 106 \\
3 / 50 & \\
\end{align*}
\]
16. A number pattern is shown below.

row 1  1
row 2  4  7
row 3  10 13 16
row 4  19 22 25 28

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

\[
\begin{array}{cccc}
31 & 34 & 37 & 40 & 43 \\
\hline
43 & 31 \\
12
\end{array}
\]

Difference: 12

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

\[3(r-1)=d\]

\[d = \frac{3(r-1)}{\quad}\]
16. *Continued.* Please refer to the previous page for task explanation.

C. What is the first number in row 8?

\[ 3(r-1) = \text{d} \]
\[ 3(8-1) = \text{d} \]
\[ 3(7) = \text{d} \]
\[ 21 = \text{d} \]

First number: 85

D. What is the last number in row 8?

85 88 91 94 97 100 103 106

Last number: 106
A number pattern is shown below.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>row 1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>row 2</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>row 3</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>row 4</td>
<td>19</td>
<td>22</td>
</tr>
</tbody>
</table>

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

---

The farther you go back the more seat are in a row

---

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

\[
d = \frac{5(r)}{50}
\]

C. What is the first number in row 8?

---

D. What is the last number in row 8?
A number pattern is shown below.

row 1
row 2
row 3
row 4

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

\[ d = 3(r - 1) \]

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

C. What is the first number in row 8?

D. What is the last number in row 8?

\[ \text{first number: } 94 \]

\[ \text{last number: } 108 \]
Subject: Algebra 1          Item: Number Pattern

Name

<table>
<thead>
<tr>
<th>Number</th>
<th>Score</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>T2-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T2-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T2-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T2-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T2-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T2-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T2-7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T2-8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T2-9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T2-10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Keystone Algebra 1

Number Pattern

Handscoring Practice Set*

*Responses in this set do not have true scores. Apply scores based on scoring criteria.
This Page Intentionally Blank
A number pattern is shown below.

row 1
row 2
row 3
row 4

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>22</td>
<td>25</td>
</tr>
</tbody>
</table>

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

\[ d = 3r - 3 \]

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

C. What is the first number in row 8?

D. What is the last number in row 8?
A number pattern is shown below.

<table>
<thead>
<tr>
<th>row 1</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>row 2</td>
<td>4 7</td>
</tr>
<tr>
<td>row 3</td>
<td>10 13 16</td>
</tr>
<tr>
<td>row 4</td>
<td>19 22 25 28</td>
</tr>
</tbody>
</table>

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

\[
d = \frac{18}{58}
\]

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

\[
d = \text{more pacific.}
\]

C. What is the first number in row 8?

\[
\text{CANT SEE }
\]

D. What is the last number in row 8?

\[
\text{REFER TO C.}
\]
A number pattern is shown below.

<table>
<thead>
<tr>
<th>row 1</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>row 2</td>
<td>4</td>
</tr>
<tr>
<td>row 3</td>
<td>10</td>
</tr>
<tr>
<td>row 4</td>
<td>19</td>
</tr>
</tbody>
</table>

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

\[
\begin{array}{c}
\text{difference:} \\
12 \\
\text{2 / 50}
\end{array}
\]

B. Write an equation that can be used to find \(d\), the difference between the last number and the first number, for any row \(r\).

\[
\begin{array}{c}
d = \text{?} \\
\text{6 / 50}
\end{array}
\]

C. What is the first number in row 8?

\[
\begin{array}{c}
\text{first number:} \\
85 \\
\text{2 / 50}
\end{array}
\]

D. What is the last number in row 8?

\[
\begin{array}{c}
\text{last number:} \\
106 \\
\text{3 / 50}
\end{array}
\]
A number pattern is shown below.

<table>
<thead>
<tr>
<th>row</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>row 1</td>
<td>1</td>
</tr>
<tr>
<td>row 2</td>
<td>4</td>
</tr>
<tr>
<td>row 3</td>
<td>10</td>
</tr>
<tr>
<td>row 4</td>
<td>19</td>
</tr>
</tbody>
</table>

The pattern continues.

**A.** What is the difference between the last number in row 5 and the first number in row 5?

\[
d = r \times 3
\]

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

C. What is the first number in row 8?

\[
31 + 54 = 85
\]

first number: 85

D. What is the last number in row 8?

\[
21 + 27 + 33 + 39 + 45 = 165
\]

last #: 165
A number pattern is shown below.

<table>
<thead>
<tr>
<th>row</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>row 1</td>
<td>1</td>
</tr>
<tr>
<td>row 2</td>
<td>4 7</td>
</tr>
<tr>
<td>row 3</td>
<td>10 13 16</td>
</tr>
<tr>
<td>row 4</td>
<td>19 22 25 28</td>
</tr>
</tbody>
</table>

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

```
\[ \text{difference:} \]
```

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

```
\[ d = 3r - 3 \]
```

C. What is the first number in row 8?

```
\[ \text{first number:} \]
```

D. What is the last number in row 8?

```
\[ \text{last number:} \]
```
A number pattern is shown below.

<table>
<thead>
<tr>
<th>row</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>row 2</td>
<td>4</td>
</tr>
<tr>
<td>row 3</td>
<td>10</td>
</tr>
<tr>
<td>row 4</td>
<td>19</td>
</tr>
</tbody>
</table>

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

\[
\begin{align*}
\text{difference:} & \quad 27/50 \\
\text{number 19 is not in the 20s} & \\
\end{align*}
\]

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

\[
\begin{align*}
\text{=} & \quad r+3 \\
\text{ } & \\
\end{align*}
\]

C. What is the first number in row 8?

\[
\begin{align*}
\text{first number:} & \quad 31/50 \\
\end{align*}
\]

D. What is the last number in row 8?

\[
\begin{align*}
\text{last number:} & \quad 2/50 \\
\end{align*}
\]
16. A number pattern is shown below.

<table>
<thead>
<tr>
<th>row 1</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>row 2</td>
<td>4</td>
</tr>
<tr>
<td>row 3</td>
<td>10</td>
</tr>
<tr>
<td>row 4</td>
<td>19</td>
</tr>
</tbody>
</table>

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

\[
\begin{array}{c}
v = 28 \\
43 \\
\hline
12 \\
\end{array}
\]

difference: 12

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

\[ d = 3r - 3 \]
16. Continued. Please refer to the previous page for task explanation.

C. What is the first number in row 8?

\[ \begin{array}{cccc}
+3 & 1 \\
+6 & 4 \\
+9 & 10 \\
+12 & 19 \\
+15 & 31 \\
+18 & 46 \\
+21 & 64 \\
+24 & 85 \\
\end{array} \]

first number: \underline{109}

D. What is the last number in row 8?

\[ d = 3r - 3 \]

\[ d = 3(8) - 3 \]

\[ d = 24 - 3 \]

\[ d = 21 \]

\[ 109 + 21 = 130 \]

last number: \underline{130}
16. A number pattern is shown below.

<table>
<thead>
<tr>
<th>row 1</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>row 2</td>
<td>4 7</td>
</tr>
<tr>
<td>row 3</td>
<td>10 13 16</td>
</tr>
<tr>
<td>row 4</td>
<td>19 22 25 28</td>
</tr>
</tbody>
</table>

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

\[
\text{difference: } 12
\]

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

\[
d = (r - 1) \cdot 3
\]
16.  *Continued.* Please refer to the previous page for task explanation.

C. What is the first number in row 8?

\[85\]

first number: 85

D. What is the last number in row 8?

\[85\]

last number: 106
16. A number pattern is shown below.

row 1
row 2
row 3
row 4

The pattern continues.

![Pattern Diagram]

A. What is the difference between the last number in row 5 and the first number in row 5?

difference: 9

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

\[ d = \text{Last number} - \text{First number} \]
16. *Continued.* Please refer to the previous page for task explanation.

C. What is the first number in row 8?

First number: 07

D. What is the last number in row 8?

Last number: 180
A number pattern is shown below.

row 1
row 2
row 3
row 4
1
4
10
19

7
13
16
22
25
28

The pattern continues.

A. What is the difference between the last number in row 5 and the first number in row 5?

There is a 12 number pattern difference

difference:

37/50

B. Write an equation that can be used to find \( d \), the difference between the last number and the first number, for any row \( r \).

\[ d = 43 - 31 \]

\( d = \)

8/50

C. What is the first number in row 8?

\[ 8 \]

first number:

2/50

D. What is the last number in row 8?

\[ 106 \]

last number:

3/50
PRACTICE SET*

Subject: Algebra 1       Item: Number Pattern

Name______________________________

<table>
<thead>
<tr>
<th>Number</th>
<th>Score</th>
<th>Consensus</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
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<td>P-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-3</td>
<td></td>
<td></td>
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<td>P-4</td>
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<tr>
<td>P-5</td>
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<td></td>
</tr>
<tr>
<td>P-10</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

* Responses in this set do not have true scores. Apply scores based on scoring criteria.
Keystone Algebra 1

Number Pattern

Handscoring
Training Sets 1 and 2
True Scores/Annotations
This Page Intentionally Blank
<table>
<thead>
<tr>
<th>Page</th>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>A. 1 point – correct answer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B. 1 point – correct answer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C. 1 point – correct answer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D. 1 point – correct answer.</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>Nothing is correct for credit in any part.</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>A. 1 point – correct answer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B. 0 points – incorrect answer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C. 1 point – correct answer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D. 1 point – correct answer.</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>A. 1 point – correct answer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B. 1 point – correct answer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C. 0 points – incorrect answer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D. 0 points – incorrect answer.</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>A. 0 points – incorrect answer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B. 0 points – incorrect answer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C. 0 points – incorrect answer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D. 1 point – correct answer.</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>Nothing is correct for credit in any part.</td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>A. 1 point – correct answer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B. 0 points – incorrect answer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C. 1 point – correct answer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D. 1 point – correct answer.</td>
</tr>
<tr>
<td>8</td>
<td>4</td>
<td>A. 1 point – correct answer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B. 1 point – correct answer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C. 1 point – correct answer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D. 1 point – correct answer.</td>
</tr>
<tr>
<td>9</td>
<td>2</td>
<td>A. 0 points – insufficient answer for credit.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B. 0 points – not attempted.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C. 1 point – correct answer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D. 1 point – correct answer.</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td>A. 1 point – correct answer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B. 0 points – incorrect answer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C. 0 points – incorrect answer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D. 0 points – incorrect answer.</td>
</tr>
<tr>
<td>Page</td>
<td>Score</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>-------------</td>
</tr>
</tbody>
</table>
| 1    | 3     | A. 1 point – correct answer.  
B. 0 points – incorrect answer.  
C. 1 point – correct answer.  
D. 1 point – correct answer. |
| 2    | 4     | A. 1 point – correct answer.  
B. 1 point – correct answer.  
C. 1 point – correct answer.  
D. 1 point – correct answer. |
| 3    | 1     | A. 0 points – incorrect answer.  
B. 1 point – correct answer.  
C. 0 points – incorrect answer.  
D. 0 points – incorrect answer. |
| 4    | 0     | Nothing is correct for credit in any part. |
| 5    | 2     | A. 0 points – incorrect answer.  
B. 0 points – incorrect answer.  
C. 1 point – correct answer.  
D. 1 point – correct answer. |
| 6    | 1     | A. 0 points – incorrect answer.  
B. 0 points – incorrect answer.  
C. 0 points – incorrect answer.  
D. 1 point – correct answer. |
| 7    | 3     | A. 1 point – correct answer.  
B. 0 points – incorrect answer.  
C. 1 point – correct answer.  
D. 1 point – correct answer. |
| 8    | 4     | A. 1 point – correct answer.  
B. 1 point – correct answer.  
C. 1 point – correct answer.  
D. 1 point – correct answer. |
| 9    | 0     | Nothing is correct for credit in any part. |
| 10   | 2     | A. 1 point – correct answer.  
B. 1 point – correct answer.  
C. 0 points – incorrect answer.  
D. 0 points – incorrect answer. |