Reverse Averages: Range, Mode, Median

| 6 | 8 | 9 | 6 | 7 | 9 | 5 |

1. What is the mode? /1
2. What is the range? /1
3. What is the median? /1

A, B and C are sets of three single digit cards.  
Set A has the **same** total as Set B.  
Set B has the **same** median as Set A.

4. Complete the cards in set B

Set A: 7, 9, 4

Set B: 8

Set C has the **same** total as Set A.  
Set C has **double** the range as Set B.  

5. Complete the cards in set C

Set A: 7, 9, 4

Set C: 8
6. There are four single digit cards. The sum of the cards is 25 and the median is 7. Complete the cards with a possible solution.

\[
\begin{array}{cccc}
8 & & & \\
\end{array}
\]

7. A magician is planning a magic trick with cards numbered from 1-10, however he wants to make the pack biased. His pack of cards to have a mode of 6 but have a total of 29. Complete the cards with a possible solution.

\[
\begin{array}{cccc}
9 & & & \\
\end{array}
\]

8. The magician now wants five cards to have a total of 35 and a range of 8. Complete the cards with a possible solution.

\[
\begin{array}{cccc}
8 & & & \\
\end{array}
\]

<table>
<thead>
<tr>
<th>Skill</th>
<th>Questions</th>
<th>Total Marks</th>
<th>Available Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Averages from a list of data.</td>
<td>1, 2, 3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Reverse Median</td>
<td>4, 6</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Reverse Range</td>
<td>5, 8</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Reverse Mode</td>
<td>7</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Marks</td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>

www.missbsresources.com
1. What is the mode?

Mode = 6 and 9

2. What is the range?

Range = 9 – 5 = 4

3. What is the median?

Median = 7

A, B and C are sets of three single digit cards.

Set A has the same total as Set B.
Set B has the same median as Set A.

4. Complete the cards in set B

Set A: 7 9 4

Set B: 8 7 5

Set C has the same total as Set A.
Set C has double the range as Set B.

5. Complete the cards in set C

Set A: 7 8 5

Set C: 8 9 3
6. There are four single digit cards. The sum of the cards is 25 and the median is 7. Complete the cards with a possible solution.

```
8 6 9 2
```

25 - 8 = 17

7. A magician is planning a magic trick with cards numbered from 1-10, however he wants to make the pack biased. His pack of cards to have a mode of 6 but have a total of 29. Complete the cards with a possible solution.

```
9 6 6 8
```

9 + 6 + 6 = 21  29 - 21 = 8

8. The magician now wants five cards to have a total of 35 and a range of 8. Complete the cards with a possible solution.

```
8 10 2 5 7 10 8
```

35 - 8 = 27

<table>
<thead>
<tr>
<th>Skill</th>
<th>Questions</th>
<th>Total Marks</th>
<th>Available Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Averages from a list of data.</td>
<td>1, 2, 3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Reverse Median</td>
<td>4, 6</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Reverse Range</td>
<td>5, 8</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Reverse Mode</td>
<td>7</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Total Marks</td>
<td></td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>