

Reverse Averages: Range, Mode, Median



6 8 9 6 7 9 5

1. What is the mode?

2. What is the range?

3. What is the median?

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 | <input type="text"/> | <input type="text"/> |

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 | <input type="text"/> | <input type="text"/> |



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.

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.

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.

| Skill | Questions | Total Marks | Available Marks |
|-------------------------------|-------------|-------------|-----------------|
| Averages from a list of data. | 1, 2, 3 | | 3 |
| Reverse Median | 4, 6 | | 4 |
| Reverse Range | 5, 8 | | 4 |
| Reverse Mode | 7 | | 2 |
| | Total Marks | | 13 |

Answers

Reverse Averages: Range, Mode, Median



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

1. What is the mode?

Mode = 6 and 9

/1

2. What is the range?

Range = $9 - 5 = 4$

/1

3. What is the median?

Median = 7

/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 | Total = 20 Median = 7 |
| Set B | 8 | 7 | 5 | $20 - 8 = 12$ $12 - 7 = 5$ |

/2

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 | Total = 20 Range of set B $8 - 5 = 3$ |
| Set C | 8 | 9 | 3 | $20 - 8 = 12$ Range = 6 |

/2

Answers



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
/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
/2

$9 + 6 + 6 = 21 \quad 29 - 21 = 8$

8. The magician now wants five cards to have a total of 35 and a range of 8.

$35 - 8 = 27$

complete the cards with a possible solution.

8
10
2
5
7
10
8

9
1
6
9
9
8
/2

| Skill | Questions | Total Marks | Available Marks |
|-------------------------------|-------------|-------------|-----------------|
| Averages from a list of data. | 1, 2, 3 | | 3 |
| Reverse Median | 4, 6 | | 4 |
| Reverse Range | 5, 8 | | 4 |
| Reverse Mode | 7 | | 2 |
| | Total Marks | | 13 |