MathVine - Pre-Algebra Name_____

Mean Median Mode Range Date_____ Period_____

Find the mean, median, mode and range of each dataset. Round to the nearest tenth.

	mean	median	mode	range
1. $9, 11, 11, 11, 3$				
2. $4, 3, 5, 7, 9, 2, 10, 2$				
3. $11, 10, 3, 12, 9, 11, 3, 11$				
4. $11, 12, 9, 4, 5, 5, 4$				
5. $10, 10, 8, 5, 9, 4, 4$				
6. $9, 7, 4, 6, 11, 11, 2, 11, 4$				
7. $8, 8, 7, 6, 10, 8, 8, 3, 11$				
8. $2, 10, 8, 2, 9, 11, 6$				
9. $8, 9, 7, 11, 12, 5$				
10. $6, 8, 2, 12, 11, 6, 5, 9$				
11. $8, 10, 5, 12, 10, 2, 8$				

	mean	median	mode	range
12. $6, 6, 10, 3, 4, 4, 4, 10$				

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Mean Median Mode Range Date_____ Period_____

Find the mean, median, mode and range of each dataset. Round to the nearest tenth.

	mean	median	mode	range
1. $9, 11, 11, 11, 3$	9	11	11	8
2. $4, 3, 5, 7, 9, 2, 10, 2$	5.3	4.5	2	8
3. $11, 10, 3, 12, 9, 11, 3, 11$	8.7	10.5	11	9
4. $11, 12, 9, 4, 5, 5, 4$	7.1	5	4	8
5. $10, 10, 8, 5, 9, 4, 4$	7.1	8	10	6
6. $9, 7, 4, 6, 11, 11, 2, 11, 4$	7.2	7	11	9
7. $8, 8, 7, 6, 10, 8, 8, 3, 11$	7.7	8	8	8
8. $2, 10, 8, 2, 9, 11, 6$	6.9	8	2	9
9. $8, 9, 7, 11, 12, 5$	8.7	8.5	8	7

	mean	median	mode	range
10. $6, 8, 2, 12, 11, 6, 5, 9$	7.4	7	6	10
11. $8, 10, 5, 12, 10, 2, 8$	7.9	8	8	10
12. $6, 6, 10, 3, 4, 4, 4, 10$	5.9	5	4	7

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Solution Steps

1) $9, 11, 11, 11, 3$

Right now the numbers are out of order, so it is difficult to answer the question. So first put the numbers in order:
$3, 9, 11, 11 \text{ and } 11$

To find the mean, first add all the numbers together:
$9 + 11 + 11 + 11 + 3 = 45$
There are five numbers in the list $9, 11, 11, 11 \text{ and } 3$ so we divide by five:
$\frac{45}{5} = 9$
The mean of the set is 9

We can see that 11 is in the middle of the list. There are two numbers less than 11, and two numbers greater than 11.
The median of this set is 11

The number that appears most often is 11, so 11 is the mode of the set

Now it is easier to see that the smallest number in the list is 3 and the largest number is 11
To find the range, subtract 3 from 11:
$11 - 3 = 8$
The range of the set is 8

2) $4, 3, 5, 7, 9, 2, 10, 2$

Right now the numbers are out of order, so it is difficult to answer the question. So first put the numbers in order:
$2, 2, 3, 4, 5, 7, 9 \text{ and } 10$

To find the mean, first add all the numbers together:
$4 + 3 + 5 + 7 + 9 + 2 + 10 + 2 = 42$
There are eight numbers in the list $4, 3, 5, 7, 9, 2, 10 \text{ and } 2$ so we divide by eight:
$\frac{42}{8} = 5.25$
The mean of the set is 5.25

To find the median in this situation, take the average (mean) of 4 and 5
$\frac{4 + 5}{2} = 4.5$
The median of the set is 4.5

The number that appears most often is 2, so 2 is the mode of the set

Now it is easier to see that the smallest number in the list is 2 and the largest number is 10
To find the range, subtract 2 from 10:
$10 - 2 = 8$
The range of the set is 8

3) $11, 10, 3, 12, 9, 11, 3, 11$

Right now the numbers are out of order, so it is difficult to answer the question. So first put the numbers in order:

$3, 3, 9, 10, 11, 11, 11 \text{ and } 12$

To find the mean, first add all the numbers together:

$11 + 10 + 3 + 12 + 9 + 11 + 3 + 11 = 70$

There are eight numbers in the list $11, 10, 3, 12, 9, 11, 3 \text{ and } 11$ so we divide by eight:

$\frac{70}{8} = 8.75$

The mean of the set is 8.75

To find the median in this situation, take the average (mean) of 10 and 11

$\frac{10 + 11}{2} = 10.5$

The median of the set is 10.5

The number that appears most often is 11, so 11 is the mode of the set

Now it is easier to see that the smallest number in the list is 3 and the largest number is 12

To find the range, subtract 3 from 12:

$12 - 3 = 9$

The range of the set is 9

4) $11, 12, 9, 4, 5, 5, 4$

Right now the numbers are out of order, so it is difficult to answer the question. So first put the numbers in order:
$4, 4, 5, 5, 9, 11 \text{ and } 12$

To find the mean, first add all the numbers together:
$11 + 12 + 9 + 4 + 5 + 5 + 4 = 50$
There are seven numbers in the list $11, 12, 9, 4, 5, 5 \text{ and } 4$ so we divide by seven:
$\frac{50}{7} = 7.14$
The mean of the set is 7.14

We can see that 5 is in the middle of the list. There are three numbers less than 5, and three numbers greater than 5.
The median of this set is 5

The number that appears most often are $4 \text{ and } 5$. Since there is a tie, we say that the list has 2 modes: $4 \text{ and } 5$

Now it is easier to see that the smallest number in the list is 4 and the largest number is 12
To find the range, subtract 4 from 12:
$12 - 4 = 8$
The range of the set is 8

5) $10, 10, 8, 5, 9, 4, 4$

Right now the numbers are out of order, so it is difficult to answer the question. So first put the numbers in order:
$4, 4, 5, 8, 9, 10 \text{ and } 10$

To find the mean, first add all the numbers together:
$10 + 10 + 8 + 5 + 9 + 4 + 4 = 50$
There are seven numbers in the list $10, 10, 8, 5, 9, 4 \text{ and } 4$ so we divide by seven:
$\frac{50}{7} = 7.14$
The mean of the set is 7.14

We can see that 8 is in the middle of the list. There are three numbers less than 8, and three numbers greater than 8.
The median of this set is 8

The number that appears most often are $4 \text{ and } 10$. Since there is a tie, we say that the list has 2 modes: $4 \text{ and } 10$

Now it is easier to see that the smallest number in the list is 4 and the largest number is 10
To find the range, subtract 4 from 10:
$10 - 4 = 6$
The range of the set is 6

6) $9, 7, 4, 6, 11, 11, 2, 11, 4$

Right now the numbers are out of order, so it is difficult to answer the question. So first put the numbers in order:
$2, 4, 4, 6, 7, 9, 11, 11 \text{ and } 11$

To find the mean, first add all the numbers together:
$9 + 7 + 4 + 6 + 11 + 11 + 2 + 11 + 4 = 65$
There are nine numbers in the list $9, 7, 4, 6, 11, 11, 2, 11 \text{ and } 4$ so we divide by nine:
$\frac{65}{9} = 7.22$
The mean of the set is 7.22

We can see that 7 is in the middle of the list. There are four numbers less than 7, and four numbers greater than 7.
The median of this set is 7

The number that appears most often is 11, so 11 is the mode of the set

Now it is easier to see that the smallest number in the list is 2 and the largest number is 11
To find the range, subtract 2 from 11:
$11 - 2 = 9$
The range of the set is 9

7) $8, 8, 7, 6, 10, 8, 8, 3, 11$

Right now the numbers are out of order, so it is difficult to answer the question. So first put the numbers in order:
$3, 6, 7, 8, 8, 8, 8, 10 \text{ and } 11$

To find the mean, first add all the numbers together:
$8 + 8 + 7 + 6 + 10 + 8 + 8 + 3 + 11 = 69$
There are nine numbers in the list $8, 8, 7, 6, 10, 8, 8, 3 \text{ and } 11$ so we divide by nine:
$\frac{69}{9} = 7.67$
The mean of the set is 7.67

We can see that 8 is in the middle of the list. There are four numbers less than 8, and four numbers greater than 8.
The median of this set is 8

The number that appears most often is 8, so 8 is the mode of the set

Now it is easier to see that the smallest number in the list is 3 and the largest number is 11
To find the range, subtract 3 from 11:
$11 - 3 = 8$
The range of the set is 8

8) $2, 10, 8, 2, 9, 11, 6$

Right now the numbers are out of order, so it is difficult to answer the question. So first put the numbers in order:
$2, 2, 6, 8, 9, 10 \text{ and } 11$

To find the mean, first add all the numbers together:
$2 + 10 + 8 + 2 + 9 + 11 + 6 = 48$
There are seven numbers in the list $2, 10, 8, 2, 9, 11 \text{ and } 6$ so we divide by seven:
$\frac{48}{7} = 6.86$
The mean of the set is 6.86

We can see that 8 is in the middle of the list. There are three numbers less than 8, and three numbers greater than 8.
The median of this set is 8

The number that appears most often is 2, so 2 is the mode of the set

Now it is easier to see that the smallest number in the list is 2 and the largest number is 11
To find the range, subtract 2 from 11:
$11 - 2 = 9$
The range of the set is 9

9) $8, 9, 7, 11, 12, 5$

Right now the numbers are out of order, so it is difficult to answer the question. So first put the numbers in order:
$5, 7, 8, 9, 11 \text{ and } 12$

To find the mean, first add all the numbers together:
$8 + 9 + 7 + 11 + 12 + 5 = 52$
There are six numbers in the list $8, 9, 7, 11, 12 \text{ and } 5$ so we divide by six:
$\frac{52}{6} = 8.67$
The mean of the set is 8.67

To find the median in this situation, take the average (mean) of 8 and 9
$\frac{8 + 9}{2} = 8.5$
The median of the set is 8.5

The number that appears most often are $5, 7, 8, 9, 11 \text{ and } 12$. Since there is a tie, we say that the list has 6 modes: $5, 7, 8, 9, 11 \text{ and } 12$

Now it is easier to see that the smallest number in the list is 5 and the largest number is 12
To find the range, subtract 5 from 12:
$12 - 5 = 7$
The range of the set is 7

10) $6, 8, 2, 12, 11, 6, 5, 9$

Right now the numbers are out of order, so it is difficult to answer the question. So first put the numbers in order:
$2, 5, 6, 6, 8, 9, 11 \text{ and } 12$

To find the mean, first add all the numbers together:
$6 + 8 + 2 + 12 + 11 + 6 + 5 + 9 = 59$
There are eight numbers in the list $6, 8, 2, 12, 11, 6, 5 \text{ and } 9$ so we divide by eight:
$\frac{59}{8} = 7.38$
The mean of the set is 7.38

To find the median in this situation, take the average (mean) of 6 and 8
$\frac{6 + 8}{2} = 7$
The median of the set is 7

The number that appears most often is 6, so 6 is the mode of the set

Now it is easier to see that the smallest number in the list is 2 and the largest number is 12
To find the range, subtract 2 from 12:
$12 - 2 = 10$
The range of the set is 10

11) $8, 10, 5, 12, 10, 2, 8$

Right now the numbers are out of order, so it is difficult to answer the question. So first put the numbers in order:
$2, 5, 8, 8, 10, 10 \text{ and } 12$

To find the mean, first add all the numbers together:
$8 + 10 + 5 + 12 + 10 + 2 + 8 = 55$
There are seven numbers in the list $8, 10, 5, 12, 10, 2 \text{ and } 8$ so we divide by seven:
$\frac{55}{7} = 7.86$
The mean of the set is 7.86

We can see that 8 is in the middle of the list. There are three numbers less than 8, and three numbers greater than 8.
The median of this set is 8

The number that appears most often are $8 \text{ and } 10$. Since there is a tie, we say that the list has 2 modes: $8 \text{ and } 10$

Now it is easier to see that the smallest number in the list is 2 and the largest number is 12
To find the range, subtract 2 from 12:
$12 - 2 = 10$
The range of the set is 10

12) $6, 6, 10, 3, 4, 4, 4, 10$

Right now the numbers are out of order, so it is difficult to answer the question. So first put the numbers in order:

$3, 4, 4, 4, 6, 6, 10 \text{ and } 10$

To find the mean, first add all the numbers together:

$6 + 6 + 10 + 3 + 4 + 4 + 4 + 10 = 47$

There are eight numbers in the list $6, 6, 10, 3, 4, 4, 4 \text{ and } 10$ so we divide by eight:

$\frac{47}{8} = 5.88$

The mean of the set is 5.88

To find the median in this situation, take the average (mean) of 4 and 6

$\frac{4 + 6}{2} = 5$

The median of the set is 5

The number that appears most often is 4, so 4 is the mode of the set

Now it is easier to see that the smallest number in the list is 3 and the largest number is 10

To find the range, subtract 3 from 10:

$10 - 3 = 7$

The range of the set is 7