Worksheet

05/10/2021

Free on dw-math.com

Problem quickname: 3103

<u>1)</u>

Determine the median of the given set of numbers.

a) $-28, -66, 49, 39, -23, 47, -48, 84, -71, -23, -4$

1. Sort the numbers in ascending order:
$-71, -66, -48, -28, -23, -23, -4, 39, 47, 49, 84$

2. As the number of numbers is odd, the middle number is the median. The middle number is -23.

Median: -23

b) $-14, 92, -35, -31, -2, -63, -14, 10, 57$

1. Sort the numbers in ascending order:
$-63, -35, -31, -14, -14, -2, 10, 57, 92$

2. As the number of numbers is odd, the middle number is the median. The middle number is -14.

Median: -14

c) $29, -67, -83, 84, -54, 83, 83, 18, 96$

1. Sort the numbers in ascending order: $-83, -67, -54, 18, 29, 83, 83, 84, 96$

2. As the number of numbers is odd, the middle number is the median. The middle number is 29.

Median: 29

d) $15, 56, -52, -7, -25, -54, -79, 59, 15$

1. Sort the numbers in ascending order: $-79, -54, -52, -25, -7, 15, 15, 56, 59$

2. As the number of numbers is odd, the middle number is the median. The middle number is -7.

Median: -7

e) $4, -8, -75, -94, -95, 65, -94, -99, -45$

1. Sort the numbers in ascending order:
$-99, -95, -94, -94, -75, -45, -8, 4, 65$

2. As the number of numbers is odd, the middle number is the median. The middle number is -75.

Median: -75

2)

Determine the mean of the given set of numbers.

 a) $23, -92, 46, 26, -42, -59, 80, 75, 23, 9, 87$

  1. Calculate the sum of the numbers: Sum $= 176$.

  2. Divide the sum by the number of numbers: $176 \div 11 = 16$.

  Mean value: 16

 b) $91, 27, -49, -85, 65, -4, 27, 3, 33$

  1. Calculate the sum of the numbers: Sum $= 108$.

  2. Divide the sum by the number of numbers: $108 \div 9 = 12$.

  Mean value: 12

 c) $51, 3, -88, -29, -76, -81, 10, -96, -96, 24, -73$

  1. Calculate the sum of the numbers: Sum $= -451$.

  2. Divide the sum by the number of numbers: $-451 \div 11 = -41$.

  Mean value: -41

 d) $1, 85, -66, -61, 74, 36, -66, 80, -38, -29, 72$

  1. Calculate the sum of the numbers: Sum $= 88$.

  2. Divide the sum by the number of numbers: $88 \div 11 = 8$.

  Mean value: 8

 e) $13, 81, 81, -92, -69, 10, -78, 60, 39, -2, 78$

  1. Calculate the sum of the numbers: Sum $= 121$.

  2. Divide the sum by the number of numbers: $121 \div 11 = 11$.

  Mean value: 11

3)

Determine the requested value for the given set of numbers.

a) The mean value of : $15, 10, 27, 39, 10, 39, 14$ Mean value: 22
b) The mean value of : $24, 41, 40, 6, 33, 41, 46, 47, 46$ Mean value: 36
c) The median of: $14, 12, 29, 14, 10, 23, 28, 6$ Median: 14
d) The mean value of : $4, 17, 40, 13, 7, 46, 13, 12$ Mean value: 19
e) The mean value of : $2, 49, 49, 41, 43, 42, 26$ Mean value: 36

f) The median of: 21,31,44,41,24,41,8 Median: 31
g) The mean value of : 44,13,1,31,13,38,28 Mean value: 24
h) The median of: 19,12,6,9,3,40,9,35,47 Median: 12
i) The median of: 1,22,24,40,22,17,8,34 Median: 22
j) The median of: 15,4,22,34,26,15,10 Median: 15

4)

Quick:
3103

Determine the requested value for the given set of numbers.

a) The median of: $-14, -12, -1, 9, 11, 11, 11, 18, 18, 19$

1. Sort the numbers in ascending order: $-14, -12, -1, 9, 11, 11, 11, 18, 18, 19$

2. As the number of numbers is even, the median is determined by adding the two middle numbers and dividing the result by two. The middle numbers are 11 und 11. $(11 + 11) \div 2 = 11$.

Median: 11

b) The mean value of : $-19, -17, -15, -13, -13, 3, 9, 10, 19$

1. Calculate the sum of the numbers: Sum $= -36$.

2. Divide the sum by the number of numbers: $-36 \div 9 = -4$.

Mean value: -4

c) The mean value of : $-20, -19, -18, -15, -13, -8, -1, 0, 11, 14, 14$

1. Calculate the sum of the numbers: Sum $= -55$.

2. Divide the sum by the number of numbers: $-55 \div 11 = -5$.

Mean value: -5

d) The median of: $-19, -16, -15, -13, -13, -11, -10, -8, -2, 8, 11$

1. Sort the numbers in ascending order:
$-19, -16, -15, -13, -13, -11, -10, -8, -2, 8, 11$

2. As the number of numbers is odd, the middle number is the median. The middle number is -11.

Median: -11

e) The mean value of : $-18, -16, -10, -9, -9, -4, -3, 1, 14$

1. Calculate the sum of the numbers: Sum $= -54$.

2. Divide the sum by the number of numbers: $-54 \div 9 = -6$.

Mean value: -6

f) The median of: $-19, -14, -13, -12, -12, -10, -7, 4, 11, 12$

1. Sort the numbers in ascending order:
$-19, -14, -13, -12, -12, -10, -7, 4, 11, 12$

2. As the number of numbers is even, the median is determined by adding the two middle numbers and dividing the result by two. The middle numbers are -12 und -10. $(-12 + -10) \div 2 = -11$.

Median: -11

g) The median of: $-17, -9, -5, -3, 0, 2, 9, 16, 16$

1. Sort the numbers in ascending order: $-17, -9, -5, -3, 0, 2, 9, 16, 16$

2. As the number of numbers is odd, the middle number is the median. The middle number is 0.

Median: 0

h) The median of: $-19, -15, -13, -6, 1, 1, 3, 11, 19$

1. Sort the numbers in ascending order: $-19, -15, -13, -6, 1, 1, 3, 11, 19$

2. As the number of numbers is odd, the middle number is the median. The middle number is 1.

Median: 1

i) The median of: $-19, -18, -18, -15, -9, -5, 1, 10, 16, 17$

1. Sort the numbers in ascending order:
$-19, -18, -18, -15, -9, -5, 1, 10, 16, 17$

2. As the number of numbers is even, the median is determined by adding the two middle numbers and dividing the result by two. The middle numbers are -9 und -5. $(-9 + -5) \div 2 = -7$.

Median: -7

j) The median of: $-18, -16, -15, -14, -14, -12, -5, -1, 5, 17, 18$

1. Sort the numbers in ascending order:
$-18, -16, -15, -14, -14, -12, -5, -1, 5, 17, 18$

2. As the number of numbers is odd, the middle number is the median. The middle number is -12.

Median: -12

Good Luck!