Jmath.net

CENTRAL TENDENCY: Worksheet 4

Find the mean, median and mode for the following data.

1) 5, 10, 5, 14, 14, 9

2) 29, 34, 18, 21, 20, 21, 25

3) 1, 4, 4, 3, 2, 8, 8, 12, 5, 11

4) 89, 90, 79, 94

5) In Dakota's first four basketball games he scored a total of 57 points. How many points would he need in the next game to have a 15 point average?

6) There were 5 babies born at Memorial Hospital last weekend.
   The length of the babies ranged from 16 inches to 21.5 inches. Their lengths were:
          16 in.   20.5 in.   19 in.   21.5 in.   19 in.
   What were the mean, median and mode for these lengths?

Jmath.net

KEY
CENTRAL TENDENCY: Worksheet 4

Find the mean, median and mode for the following data.

1) 5, 10, 5, 14, 14, 9

   Mean: (5 + 10 + 5 + 14 + 14 + 9) ÷ 6 = 57 ÷ 6 = **9.5**
   Median: List from small to large. 5,5,**9,10**,14,14. Median is between 9 & 10: **9.5**
   Mode: Appears the most number of times: **Two modes: 5 & 14**

2) 29, 34, 18, 21, 20, 21, 25

   Mean: (29 + 34 + 18 + 21 + 20 + 21 + 25) ÷ 7 = 168 ÷ 7 = **24**
   Median: List from small to large. 18,20,21,**21**,25,29,34.   Middle score is the median: **21**
   Mode: Appears the most number of times: **21**

3) 1, 4, 4, 3, 2, 8, 8, 12, 5, 11

   Mean: (1 + 4 + 4 + 3 + 2 + 8 + 8 + 12 + 5 + 11) ÷ 10 = 58 ÷ 10 = **5.8**
   Median: List from small to large. 1,2,3,4,**4,5**,8,8,11,12.   Median is between 4 & 5: **4.5**
   Mode: Appears the most number of times: **Two modes: 4 & 8**

4) 89, 90, 79, 94

   Mean: (89 + 90 + 79 + 94) ÷ 4 = 352 ÷ 4 = **88**
   Median: List from small to large. 79,**89,90**,94.   Median is between 89 & 90: **89.5**
   Mode: Appears the most number of times: **There is no mode.**

5) In Dakota's first four basketball games he scored a total of 57 points. How many points would he need in the next game to have a 15 point average?

   $$\frac{57 + x}{5} = 15$$ ⇒   Multiply by 5. Subtract 57.
   $x = \mathbf{18}$

6) There were 5 babies born at Memorial Hospital last weekend.
   The length of the babies ranged from 16 inches to 21.5 inches. Their lengths were:
   16 in.   20.5 in.   19 in.   21.5 in.   19 in.
   What were the mean, median and mode for these lengths?

   Mean: (16 + 20.5 + 19 + 21.5 + 19) ÷ 5 = 96 ÷ 5 = **19.2 in.**
   Median: List from small to large. 16,19,**19**,20.5,21.5   Middle score is the median: **19 in.**
   Mode: Appears the most number of times: **19 in.**