Teach san ban

Exercise 7.8

1. If the heights, in centimeters, of a group of students are 180, 180, 173, 170 and 167, what is the mean height of these students?
2. What is the median age of a class in which 14 students are 14 years old and 16 students are 15 years old?

3. For the set of data 5,5,6,7,7, which statement is true?
   (*a*) Mean = Mode (*b*) Median = Mode
   (*c*) Mean = Median
4. For which set of data will the mean, median and mode all are equal?
   (*a*) 1,2,5,5,7 (*b*) 1,2,5,5,8,9 (*c*) 1,1,1,2,5 (*d*) 1,1,2.
5. On a test consisting of 20 questions 15 student received are following scores:
   17, 14, 16, 18, 17, 19, 15, 15, 16,13, 17, 12, 18, 16, 17
   (*i*) Find the median score (*ii*) Find the mean
   (*iii*) Find the mode.
6. The median of the observations 11, 12, 14, 18, $x + 2$, $x + 4$, 30, 32, 35, 41 arranged in ascending order is 24, find the value of x.
7. The median of the observations 29, 32, 48, 50, x, $x + 2$, 72, 78, 84, 95 arranged in ascending order is 63. Find the value of x.
8. The marks of 18 students in a test score were as follows :
   5, 6, 8, 9, 10, 11, 12, 13, 13, 14, 14, 15, 15, 15, 16, 18, 19, 10.
   Calculate
   (*i*) Mean (*ii*) Median (*iii*) Mode
9. If 3, 8, 10, x, 14, 16, 18, 20 are in ascending order and their median is 13. Calculate the numerical value of x.
10. A boy scored the following marks in various class tests during the terms, each test being marked 15, 17, 16, 7, 10, 12, 14, 16, 19, 12, 16 out of 20.
    (*i*) What are his model marks?
    (*ii*) What are his median marks?
    (*iii*) What are his mean marks?

Answers

1. 174 **2.** 15 years. **3.** Mean = Median = 6.
4. 1, 2, 5, 5, 8, 9 **5.** (*i*) 16 (*ii*) 16 (*iii*) 17
6. 21 **7.** 62
8. (*i*) 12.3 (*ii*) 13 (*iii*) 15
9. $x = 12$ **10.** 16, 15, 14

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