

1. For each of the following sets of numbers, show all work in calculating the mean, range, median and mode.

a) 9 4 7 4 5 8 6 4 3

i) mean \_\_\_\_\_

ii) range \_\_\_\_\_

iii) median \_\_\_\_\_

iv) mode \_\_\_\_\_

b) 12 15 13 11 14 20 30 16 19 10

i) mean \_\_\_\_\_

ii) range \_\_\_\_\_

iii) median \_\_\_\_\_

iv) mode \_\_\_\_\_

c) 12 13 5 13 17 8 20 9 17 15 16 19 30

i) mean \_\_\_\_\_

ii) range \_\_\_\_\_

iii) median \_\_\_\_\_

iv) mode \_\_\_\_\_

d) 1.2 3.1 6.4 7.3 3.1 4.5 2.3 9.2 4.5 2.1

i) mean \_\_\_\_\_

ii) range \_\_\_\_\_

iii) median \_\_\_\_\_

iv) mode \_\_\_\_\_

1. The monthly rainfall for 1992 is recorded below.

Jan	10 mm	Feb	8 mm	Mar	18 mm	April	35 mm
May	26 mm	June	12 mm	July	8 mm	Aug	15 mm
Sept	23 mm	Oct	20 mm	Nov	14 mm	Dec	16 mm

a) Find the mean, range, median and mode of the amount of rainfall.

i) mean \_\_\_\_\_

ii) range \_\_\_\_\_

iii) median \_\_\_\_\_

v) mode \_\_\_\_\_

b) Based on the data above, what would you predict as the average monthly rainfall for 1993? \_\_\_\_\_

c) Which month has a rainfall closest to the mean? \_\_\_\_\_

d) How many months had a rainfall within 10 mm of the median? \_\_\_\_\_

e) If the range is a small number, what does this tell you about the rainfall for 1992?

2. During the 1992 Winter Olympics in France, a Canadian skater had the following scores.

10.0 9.8 8.4 9.2 8.9 9.5 8.4 8.7 9.2 9.8

a) Find the mean, range, median and mode of the scores.

i) mean \_\_\_\_\_

ii) range \_\_\_\_\_

iii) median \_\_\_\_\_

v) mode \_\_\_\_\_

b) Which of the above, mean, range, median or mode, best describes the skaters performance? \_\_\_\_\_

c) If the range was a large number, what does this tell you about the judges?  
\_\_\_\_\_

d) How many scores were within .5 of the median score? \_\_\_\_\_

e) In these competitions, the lowest and highest scores are not counted in calculating the mean score. What is the mean and range if these scores are not included?

i) mean \_\_\_\_\_ ii) range \_\_\_\_\_

3. Chris obtained these scores on 8 Mathematics test.

65% 67% 72% 70% 65% 62% 75% 68%

a) Find the mean, range, median and mode of the scores.

i) mean \_\_\_\_\_

ii) range \_\_\_\_\_

iii) median \_\_\_\_\_

v) mode \_\_\_\_\_

b) Which of the above, mean, range, median or mode, best describes Chris' Math achievement? \_\_\_\_\_

c) Which of the above, mean, range, median or mode, best describes Chris' consistency? \_\_\_\_\_

d) If the range was a very large number such as 50, does this necessarily mean that Chris does poorly half of the time and does well the other half of the time? Explain your answer.

\_\_\_\_\_  
\_\_\_\_\_

4. The scores out 100 for 30 students are shown below.

16, 30, 60, 75, 83, 43, 47, 59, 89, 92, 75, 59, 62, 73, 69,  
83, 45, 63, 87, 88, 65, 39, 67, 64, 59, 78, 89, 54, 20, 68,

a) Find the mean, range, median and mode of these scores.

i) mean \_\_\_\_\_

ii) range \_\_\_\_\_

iii) median \_\_\_\_\_

v) mode \_\_\_\_\_

b) If 50% is a passing grade, was the average score above the passing grade? \_\_\_\_\_

c) If the median score is over 50, does this mean that most of the students passed or does it mean that most of the students failed?

\_\_\_\_\_

d) If the range is a small number, what does it say about the type of students in this class?

\_\_\_\_\_

5. The following shows the number of used cars sold in the lower mainland in 1992.

Toyota	131	Nissan	122
Ford	97	Chrysler	119
G.M.	153	Mazda	34

a) Find the mean, range, median and mode of these sales.

i) mean \_\_\_\_\_

ii) range \_\_\_\_\_

iii) median \_\_\_\_\_

v) mode \_\_\_\_\_

b) Which type of car was closest to the average in sales? \_\_\_\_\_

c) How many types of cars were above the average in sales? \_\_\_\_\_

d) If the range was a small number, would most of the cars sold be close to the average in sales? Explain your answer.

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6. Canuck Attendance for the first 6 games in 1992 is shown below.

Game 1: 16 000	Game 2: 18 500	Game 3: 9 000
Game 4: 14 300	Game 5: 13 200	Game 6: 15 350

a) Find the mean, range, median and mode of these sales.

i) mean \_\_\_\_\_

ii) range \_\_\_\_\_

iii) median \_\_\_\_\_

v) mode \_\_\_\_\_

b) Give a reason why you think the range is such a large number.

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c) If the range was a small number such as 1 000, does this mean that the attendance is consistently high? Explain your answer.

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