

Math Test – Data Management

May 21

5.1 1. A survey was conducted to decide if a new hockey arena should be built. The question was, “We have one hockey arena that is always in use. Do we need a new hockey arena?”

Yes _____ No _____”

- a) Is the question biased? Explain.
- b) If your answer to part a is yes, rewrite the question so it is not biased.

A)

B)

- 1.** a) Explain the difference between primary and secondary data.
- b) State if primary data or secondary data are used in each case. Justify your answers.
 - i) Anna searched the Internet to find the top ten movies of the year.
 - ii) Rory phoned his friends to ask if they were coming to his party.

A)

B) i)

ii)

Jacob collected the data in the table below. The table lists 5 TV shows that air on Sunday evenings. The survey question was "Which of these shows is your favourite?"

Everyone Loves Jordan____, Girl Meets World____, Lost in Time____, Metro PD____, Reality Shock____"

TV Show	Tally	Frequency	Rel. Frequency	Percent
Malibu Rescue	### ### ##			%
THE BABYSITTERS CLUB	### ###			%
Fuller House	## ####			%
The Letter for the King	####			%
Alexa and Katie	### ### ### ##			%

- Write the frequency of each response.
- How many people did Jacob survey?
- Suppose you were a TV producer and had to take one show off the air. Which show would it be? Explain.
- Suppose you were an advertiser. Which show would you advertise with? Why?

2. Caitlin received these test marks in each subject.

- a) Find the mean, median, and mode for each subject.
- b) Explain what information each measure of central tendency gives.
- c) Which subject is Caitlin best at? Worst at? Explain your reasoning.

Caitlin's Marks							
Math	85	69	92	55	68	75	78
Spelling	72	81	50	69	81	96	92
History	68	74	82	80	76	67	74

A) MEAN:

MEDIAN:

MODE:

B)

C)

CHALLENGE QUESTION:

Parham received these marks on 7 math tests:

91, 75, 95, 80, 83, 86, 68

What mark will he need on his next test in each case?

Justify each answer.

- a) The mean of his 8 tests is 84.
- b) The mode of his 8 tests is 86.
- c) The median of his 8 tests is 84.

4. Here are the history test scores for students in Ms. Epstein's class.

History Test Scores

56 87 98 34 66 75 50
69 70 83 99 55 83 56
62 90 47 92 75 85 68
98 78 62 51 59 75 81
58 79 80 94 92 63 71

- Draw a stem-and-leaf plot to represent the data.
- What is the range of the scores?
- The pass mark is 50.
How many students did not pass the test?
- Students who scored below 60 had to rewrite the test.
How many students rewrote the test?
- Find the median score.
- Find the mode score.

TITLE:

STEM	LEAF
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	