Answer each of the following multiple choice data management questions. Pick three of the questions, and explain how you know that your answer is correct.

The chart below shows data about DVD sales for 2 weeks.

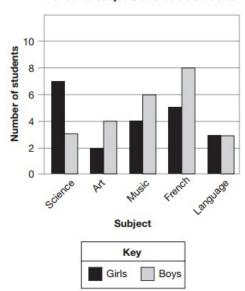
DVD Type	Week 1	Week 2
Comedy	\$75 800	\$52 750
Mystery	\$108 000	\$99 700
Adventure	\$75 800	\$53 950

Which of the following statements about this data is **false**?

- a Sales for all 3 DVD types decreased over the 2 weeks.
- b Week 2 sales for all 3 DVD types totalled \$206 400.
- c Comedy sold less than either of the other types of DVDs over the 2 weeks.
- d Total sales for adventure DVDs are about double those for mystery.

The following graph shows the favourite subjects of some Grade 6 students.

### Favourite Subjects of Grade 6 Students



Based on the data in the graph, which of the following statements is true?

- a Most boys chose science as their favourite subject.
- b Science is the least favourite subject of these students.
- c French is the favourite subject of twice as many students as music.
- d Twice as many girls chose music as chose art as their favourite subject.

What is the mean of a set of data?

- a the value that occurs most often
- b the middle value when the set is arranged in order
- c the difference between the largest and the smallest values
- d the result of adding all the values and dividing by the number of values

Maddie's and Lisa's scores on 5 math quizzes are shown in the table below.

Math Scores out of 30

Maddie's scores	20	23	28	21	23
Lisa's scores	21	22	26	25	26

According to the data in the table, Maddie's mean score is

- a lower than Lisa's mean score.
- b the same as Lisa's mean score.
- c higher than Lisa's median score.
- d the same as Lisa's median score.

Mrs. Smyte records the number of people in the school auditorium every hour during a school day. The data she collects show a maximum of 325 people in the auditorium. Which of the following is an appropriate scale for the vertical axis of the line graph for these data?

- a 7 increments with each increment representing 40 people
- b 10 increments with each increment representing 35 people
- c 15 increments with each increment representing 20 people
- d 20 increments with each increment representing 12 people

Mr. Christy records the number of sit-ups the students in his class can do in one minute. The table below shows the results for 8 students.

Mr. Christy's Class

Name	Number of sit-ups
Caleb	23
Mireille	34
Jochen	43
Pavel	22
Abdul	43
Sebastian	32
Marina	23
Yusef	33

Which stem-and-leaf plot displays the same data?

Which stem-and-leaf plot displays the same data?

## a Number of Sit-ups

Stem	Leaf
2	2 3
3	2 2 3 4 4
4	4

## b Number of Sit-ups

Stem	Leaf
2	2 3
3	2 3 4
4	3

# C Number of Sit-ups

Stem	Leaf
2	2 3 3
3	3 3 4
4	3 4

### d Number of Sit-ups

Stem	Leaf
2	2 3 3
3	2 3 4
4	3 3

The pictograph below shows the number of students who ride the bus to school.

Students Riding the Bus

Grade	Number of students
5	xxxxxxxxx
6	XXXXXXX
7	XXXXXX
8	XXXXX

Key
Each X represents 5 students.

Which bar graph represents the same data?

