

MARKS

4
(1, 1, 2)

4. Last year, a small accounting firm paid each of its five clerks \$22,000, two junior accountants \$50,000 each, and the firm's owner \$270,000.
- (a) What is the average salary paid at the firm? Show your reasoning.
 - (b) What is the median salary? Show your reasoning.
 - (c) What is the standard deviation of the salaries? Show your calculations.

(a) \$ (a)
Average

(b) \$ (b)
Median

(c) \$ (c)
S.d.

MARKS

3
(1, 1, 1)

5. This year, the firm in Question 4 pays the same salaries as last year to the clerks and junior accountants, while the owner's take increases to \$430,000.
- (a) How does this change affect the average salary? Show your reasoning.
 - (b) How does the change affect the median salary? Show your reasoning.
 - (c) Explain briefly, *without calculation*, how the change affects the standard deviation of the salaries.

(a) _____ (a)
Effect on average

(b) _____ (b)
Effect on median

(c) _____ (c)
Effect on s.d.

MARKS

2

6. The average and median salaries of major league baseball players in 1993 were \$490,000 and \$1,160,000. Which of these two values is the average and which is the median? Explain your reasoning briefly.

\$
 Average

\$
 Median