

3 The back-to-back stem-and-leaf diagram shows the annual salaries, in dollars, of 27 employees at each of two companies, Browns and Greens.

Browns									Greens								
(3)	9 8 4							30	6	8	(2)						
(7)	8	8	5	3	3	1	0	31	2	4	5	8	(4)				
(7)	9	7	6	4	2	2	0	32	3	6	6	7	9	(5)			
(6)	8 7 5				5	3	1	33	1	1	3	7	8	8	9	9	(8)
(3)	4 2 2						34	0	2	3	5	6	9	(6)			
(1)	7							35	3	7	(2)						

Key: 6|32|7 means \$32 600 for Browns and \$32 700 for Greens.

(a) Find the median and interquartile range for the annual salaries of employees at Browns. [3]

The annual salary of an employee at Browns is denoted by x thousand dollars and the annual salary of an employee at Greens is denoted by y thousand dollars. It is given that, for the 27 employees at each of the companies,

$\sum x = 878.3, \sum x^2 = 28\,616.09, \sum y = 896.5, \sum y^2 = 29\,815.63.$

(b) Find the mean and standard deviation of the annual salaries of these 54 employees. [5]