



S08-10min Comparing Data Sets: 10-minute Pack

EDEXCEL 1ST0 · Calculator allowed · about 10 minutes

Total Marks

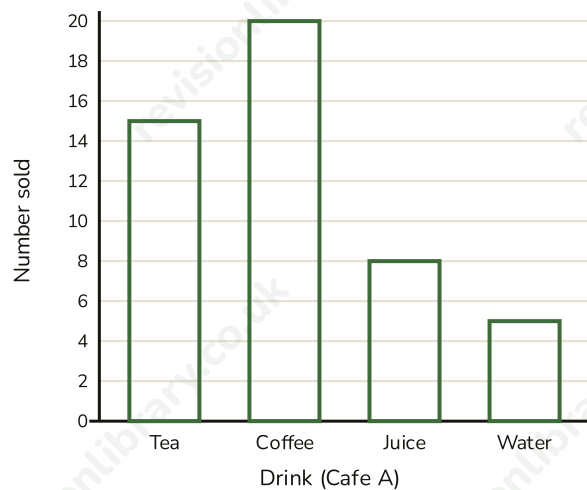
Name: _____ Date: ____ / ____ / ____

Answer ALL questions. Show all your working.

1 The bar charts show the number of each drink sold at two cafes one morning.

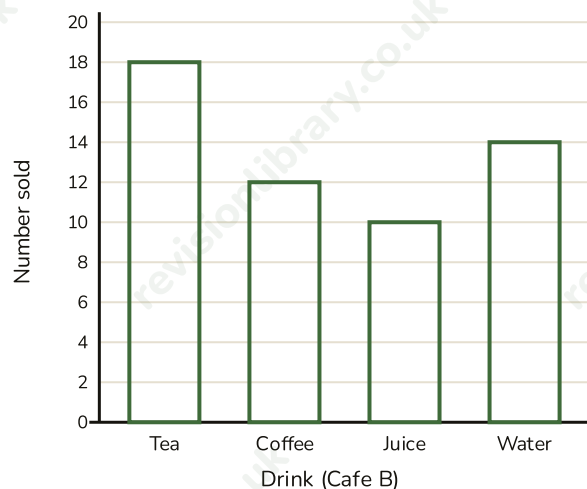
(a) From the bar chart for Cafe A, write down the modal (most popular) drink.

(1)



(b) From the bar chart for Cafe B, write down the modal (most popular) drink.

(1)



- (c) Compare the two cafes' most popular drinks, and suggest one reason why they might differ. (2)

(Total for Question 1 is 4 marks)

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- 2 The daily temperatures (in degrees Celsius) were recorded for two towns over 6 days.

Elm: 14, 16, 15, 13, 17, 15

Oak: 18, 9, 20, 8, 17, 6

- (a) Calculate the mean temperature for Elm. (2)

-
(b) Calculate the mean temperature for Oak. (2)

-
(c) Calculate the range of temperatures for each town. (2)

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(d) Compare the two towns' weather using your answers, and write a conclusion. (1)

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(Total for Question 2 is 7 marks)

Mark scheme · S08-10min Comparing Data Sets: 10-minute Pack

Question 1

- (a) **B1** Coffee cao
- (a) **Answer: Coffee**
- (b) **B1** Tea cao
- (b) **Answer: Tea**
- (c) **B1** identifies that the modal drink is different at the two cafes (Coffee at Cafe A, Tea at Cafe B)
- (c) **B1** gives a plausible contextual reason for the difference (e.g. Cafe A may be near commuters wanting a stronger caffeine drink; Cafe B may have more customers who prefer tea), oe - accept any sensible reason
- (c) **Answer: Coffee is most popular at Cafe A; Tea is most popular at Cafe B - likely due to differences in the type of customer at each cafe.**

Question 2

- (a) **M1** $(14+16+15+13+17+15) / 6$, oe
- (a) **A1** 15 cao
- (a) **Answer: 15 C**
- (b) **M1** $(18+9+20+8+17+6) / 6$, oe
- (b) **A1** 13 cao
- (b) **Answer: 13 C**
- (c) **B1** Elm range = 4 (17 - 13)
- (c) **B1** Oak range = 14 (20 - 6)
- (c) **Answer: Elm: 4 C; Oak: 14 C**
- (d) **B1** Oak had a lower mean but a much bigger range than Elm, so Oak's weather was more variable/less consistent even though Elm was slightly warmer on average, oe
- (d) **Answer: Oak's weather was more variable (bigger range) despite Elm being slightly warmer on average.**