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| Name:  Class: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | Date:\_\_\_\_\_\_\_\_\_ |
|  | **Year 11 Essential Mathematics Unit 2**  SCORE:  / 25    **Mini Test 1.1 2018**  **Topic – Data analysis and Displays**  ***Full working out MUST be shown to get full marks for each question.*** | | |
| **Total Time:** | 30 minutes |  | |
| **Weighting:** | 1% |
| **Equipment:** | To be provided by the student: Pen, pencil, ruler, scientific calculator, 1 single sided page of A4 notes | | |

1. The Year 11 AFL coach created a histogram of their students scores across a two 20 game seasons.

[1+1+3 = 5 marks]

* 1. Which interval is the modal set?
  2. Which interval would the median be in?
  3. He records the next five game scores as 120, 124, 128, 131, 132.

After adding a 6th score, the mean of these 6 games is 126 points. What was the final score?

1. Jessica is saving for her first car. She has a list of the prices for 7 cars that she likes.

[5+2+2 = 9 marks]

|  |  |
| --- | --- |
| Car | Price |
| 2011 VW Passat | $9,000 |
| 2013 Honda Jazz | $10,790 |
| 2011 Mitsubishi ASX | $11,987 |
| 2008 Subaru Impreza | $7,200 |
| 2011 Holden Captiva | $11,990 |
| 2014 Ford Focus | $9,990 |
| 2009 Toyota Corolla | $9,989 |

1. What is the 5-number summary for Jessica’s selection?
2. Calculate the interquartile range of price of the selection of cars
3. What information does the interquartile range provide about the price of cars?
4. The following are the sales prices for a selection of properties in Baldivis

$420 000, $380 000, $345 000, $1 290 000, $327 000

[5+2+2+2 = 11 marks]

1. Show how $1 290 000 is the outlier in this set of data.
2. Calculate the mean of the prices with and without the outlier included.
3. Calculate the median of the prices with and without the outlier included.
4. Would you use the mean or median to describe the property prices in Baldivis? Explain your answer in one to two sentences.