

# Line Graphs

Line Graphs are used to display changes over time

**RANGE:** The difference between the high and low numbers in a set.

**MEAN:** The average of a set of numbers.

**MODE:** The most frequently occurring number in a set of numbers.

**MEDIAN:** The middle number in a set of numbers.

The table below shows the temperatures recorded in Melbourne, Tasmania and Darwin over the past week.

Your task is to create a line graph that shows the variance in temperature of each state.

DAY	Melbourne	Tasmania	Darwin
Sunday	9	8	25
Monday	13	4	22
Tuesday	12	5	28
Wednesday	16	2	23
Thursday	18	7	18
Friday	18	10	16
Saturday	13	11	14

The table below shows the median house prices of Croydon Hills, Toorak and Doveton over the past 12 years.

Your task is to create a line graph that shows the variance in price of each suburb.

YEAR	Croydon Hills	Toorak	Doveton
2002	370,000	760,000	180,000
2003	400,000	920,000	210,000
2004	450,000	880,000	225,000
2005	420,000	900,000	230,000
2006	480,000	900,000	230,000
2007	520,000	910,000	240,000
2008	500,000	950,000	250,000
2009	520,000	910,000	250,000
2010	580,000	980,000	250,000
2011	580,000	1,040,000	265,000
2012	625,000	1,090,000	300,000
2013	650,000	1,120,000	300,000

## TEMPERATURE GRAPH

Question 1: What was the mean temperature in Melbourne over the past week?

Question 2: What was the range in temperatures in Darwin over the past week?

Question 3: From the whole set of numbers (all states), which temperature was the mode?

Question 4: Solve the median of the temperatures in Tasmania from the past week.

Question 5: Which day saw the highest mean temperature recorded across all three states?

Question 6: What was the difference between the mean temperatures recorded in Darwin and Tasmania over the past week?

Question 7: What was the mean temperatures of all three states (separately) on the weekend?

Question 8: Where would you have liked to have been on Wednesday, and why?

## HOUSE PRICES GRAPH

Question 1: In 2002, what was the difference between the median prices of all three suburbs?

Question 2: Which suburb had the most consistent price rises over the period shown?

Question 3: Which years saw the single biggest price rise of all three suburbs?

Question 4: What was the mean price over the period for Croydon Hills?

Question 5: What was the range in price for Toorak over the twelve years?

Question 6: Which years did the median price increase in all three suburbs?

Question 7: By what percentage did the price in Croydon Hills increase from 2003 to 2004?

Question 8: In 2004, what fraction was the median price of houses in Doveton compared to Croydon Hills?