#### Moving House Levels 3-4

# **Rent or Buy?**

You need 🗾 a calculator

a classmate

П

-	
mode	the number that appears most often in a set of data
median	the number that comes in the middle of a set of numbers when they are arranged in order
mean	the sum of the numbers divided by the number of numbers (sometimes called the average)

### Activity One

1.

3.

Melissa's mum is considering whether to buy a house in Central Taurapa, Normandy, or Fitzherbert. Melissa finds some house prices for each area in the newspaper and lists them in a table:

1	Central Taurapa	Normandy	Fitzherbert
T	\$200,000	\$150,000	\$78,000
1	\$344,000	\$207,000	\$125,000
4	\$250,000	\$160,000	\$1,400,000
5	\$355,000	\$230,000	\$69,000
P	\$293,000	\$225,000	\$89,000

- a. Work out the mean price and the median price for each area.
- **b**. Which area has the highest mean price?
- c. Which area has the highest median price?
- **d**. Do you think the mean price or the median price gives a more accurate impression of house prices in an area? Why?

Melissa finds a 2-year-old newspaper with these house prices:

Central Taurapa	Normandy	Fitzherbert
\$214,000	\$175,000	\$78,000
\$373,000	\$119,000	\$125,000
\$251,000	\$92,000	\$1,283,000
\$374,000	\$200,000	\$71,000
\$293,000	\$125,000	\$90,000
\$295,000	\$120,000	\$159,000

- a. Work out the mean and median prices.
- **b**. Which area's prices have increased the most in the last 2 years:
  - i. by mean?
  - ii. by median?

Melissa's mum wants to buy a house that is likely to increase in value. What would be the best area for her to buy in?

Calculating mean and median and interpreting data

# Activity Two

Melissa finds out the weekly rents for 10 different properties in Normandy:

Weekly rents for houses in Normandy									
\$300	\$270	\$320	\$200	\$270	\$270	\$200	\$240	\$260	\$270

- 1. a. Work out the mean rent in Normandy.
  - **b**. What is the most common rent (the mode)?

Maybe it's cheaper to rent

a house than buy one.

Melissa's mum

2. Melissa gathers information about the house that they are thinking of buying. She makes this table:

Owning a house in Normandy	Cost	Working
Repayments on mortgage	\$800 per month	
Rates	\$195 per 2 months	
Maintenance	\$1,000 per year	
Insurance	\$450 per year	
Yearly cost of owning a house		

- a. Copy and complete Melissa's table.
- **b.** Work out whether renting or buying a house in Normandy is cheaper.
- On the day that Melissa's mum has to decide whether to make an offer on the house, interest rates go up, and so the cost of mortgage repayments rises to \$870 a month. At the same time, Normandy rates rise to \$1,560 per year. Is it now cheaper to rent or to buy a house in Normandy?

## Investigation

1. Find out how much it costs to rent and how much it costs to buy a 3-bedroom house in your area.

Tell your classmate five good reasons for renting a house. Get your classmate to give you five good reasons for buying a house.