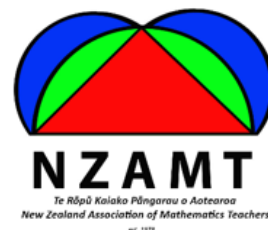
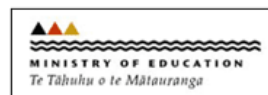




Maths Week/Pāngarau Wiki 2025



Daily Dollar/Ko te Tāra o te Rā

Bill Ellwood Memorial Series

This series is a tribute to Bill Ellwood, who wrote much of the Maths Week material from 2006 to 2019. Bill passed away in June 2021.

Set C Day 4

For students



WHAT TO DO FOR STUDENTS

- 1 You may work on your own or with someone else, and your teacher or someone else can help you.
- 2 Answer the questions.
- 3 Each question has a dollar value. Each day's questions total \$100 in value.
- 4 When you have answered the questions, your teacher will give you the answers.
- 5 If you are right, you will get the dollar value for each question. You then you can work out how many dollars you have earned for the day.
- 6 Add the number of dollars you have earned each day in the Daily Dollar questions and get a total for the week. Then you can compare your total for the week with others in your class.
- 7 Perhaps your teacher may award a prize for the highest total for the week!
- 8 Good luck!

NUMBER SEQUENCES

Number sequences are sets of numbers that follow a pattern or a rule; this rule can be referred to as a function or operation.

Each number in a sequence is called a term.

An iteration is the repetition of an operation or function.

In maths, an iteration can involve taking the output of an algorithm and plugging it back in again - repeating a process using each output as the input for the next iteration.

Have a look at this sequence:

2, 4, 6, 8, ...

The difference between consecutive terms is always two, so to get from one term to the next we simply add two

So, the sequence of numbers continues ... 10, 12, 14 etc.

And the rule would be: Add 2

Question 1 (\$10)

Write down the next three terms in this sequence:

0, 4, 8, 12, 16, 20, ...

And the rule you applied to reach the next term.

Question 2 (\$10)

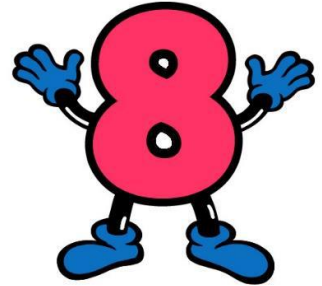
Look at this pattern, write down the rule and the next three terms in this sequence:

5, 7, 9, 11, 13, 15, ...

Question 3 (\$10)

Look at this pattern, write down the rule and the next three terms in this sequence:

12, 18, 24, 30, ...



Question 4 (\$10)

Look at this pattern, write down the rule and the next three terms in this sequence:

10, 13, 16, 19, 22, ...

Question 5 (\$10)

Look at this pattern, write down the rule and the next three terms in this sequence:

60, 55, 50, 45, ...



Question 6 (\$10)

Look at this pattern, write down the rule and the next three terms in this sequence:

24, 36, 48, 60, 72, ...

Question 7 (\$20)

Look at this pattern, write down the next three terms in this sequence:

1, 3, 6, 10, 15, 21, ...

What is the name of the numbers in this pattern?

Question 8 (\$20)

Look at this pattern, write down the next three terms in this sequence:

1, 4, 9, 16, 25, ...

What is the name of the numbers in this pattern?