



# 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 E Day 3

### 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!

## OTHER MONEY AND MEASUREMENTS

### Question 1 (\$45)

Before we had decimal currency (\$ and cents) our currency was pounds (£), shillings (s) and pence (d). There were 20 shillings in a pound and 12 pence in a shilling. (Pence is the plural of penny.)

£8 3s and 5d was written £8/3/5 and £4 16s was written £4/16/-.

- (a) How many pence were there in £15?
- (b) What percentage of a pound was 6 pence?
- (c) If I spent £13/7/9 in a shop and paid with a £20 note, how much change would I have received?

Two of the coins in this money were the sixpence and the florin. A sixpence was worth 6 pence (that shouldn't be a surprise!) and a florin was worth 2 shillings.

- (d) If I changed £8/12/- into florins, how many would I have received?
- (e) If I had 97 sixpences, how much money did I have in £ s and d?

### Question 2 (\$45)

Before we used the metric system for weights and measures, we used the imperial system, parts of which are still used in some parts of the world such as the United Kingdom and the United States. In this system, volume can be measured in gallons, with four quarts being one gallon and two pints being one quart. Distance can be measured in miles, with one mile being 1760 yards, one yard being three feet, and one foot being 12 inches. One mile is about 1.6 km.

- (a) How many feet are there in a mile?
- (b) What fraction of a mile is a foot?
- (c) A tank contains 45 gallons of water. If eight and a half gallons are removed, how many pints of water are left?
- (d) One mile is about 1.6 km. If a train is travelling at 30 metres per second, what is this in miles per hour?
- (e) In the UK, one gallon is about 4.5 litres. If a car's fuel consumption was 30 miles per gallon, what would this be in litres per 100 kilometres? (Car fuel consumption rates are commonly measured in litres per 100 kilometres these days.)

### Question 3 (\$10)

There were many other units in pre-decimal currency and the imperial system. Find out what each of the following relate to, and for (b) - (e) give an approximate conversion to the best metric unit.

- (a) Farthing
- (b) Furlong (still used in horse racing these days)
- (c) Acre
- (d) Knot (still used in seafaring)
- (e) Ounce

