

ERRATA

NEW ZEALAND MATHEMATICS 10

(2nd edition)

Second edition - 2002 initial print run

page 33 **INVESTIGATION 1** worksheet in part 2 should be:

	A	B	C	D	E	F
1		Days	Fraction of work	% of pay	1	=E1+1
2	Tim	3	=B2/B4	=C2*100	=\$C\$2*E4	
3	Becky	2	=B3/B4	=C3*100	=\$C\$3*E4	
4	Total	=B2+B3			\$0.02	=E4*2
5						

page 58 **TEXT** bottom of page – insert cancellation marks

$$= \frac{\cancel{a}^1 \times a \times \cancel{2}^1 \times 2}{\cancel{2}_1 \times \cancel{a}_1} \quad \{\text{step 2 and 3}\}$$

page 59 **EXAMPLE 14** solution – insert cancellation marks

b (middle line)

$$= \frac{\cancel{3}^1 \times \cancel{m}^1}{\cancel{m}_1 \times \cancel{6}_2}$$

c (middle line)

$$= \frac{3 \times \cancel{m}^1 \times m}{\cancel{m}_1}$$

page 60 **EXAMPLE 15** solution **a** should be:

$$\begin{aligned} \mathbf{a} \quad & \frac{x}{3} \div \frac{x}{4} \\ &= \frac{\cancel{x}^1}{3} \times \frac{4}{\cancel{x}_1} \\ &= \frac{4}{3} \end{aligned}$$

page 380 **TEXT** replace text between paragraphs starting “Each of these statements...” and “The number line below...”

We can indicate the likelihood of an event happening in the future by using a percentage.

0% indicates we believe the event **will not occur**.
100% indicates we believe the event **is certain to occur**.

All events could therefore be assigned a percentage between 0% and 100% (inclusive).

A number close to 0% indicates the event is **unlikely** to occur, whereas a number close to 100% means that it is **highly likely** to occur.

In mathematics, we usually use either decimals or fractions rather than percentages for probabilities. However, as $100\% = 1$, comparisons or conversions from percentages to fractions or decimals are very simple.

An impossible event which has a 0% chance of happening is assigned a probability of 0.

A certain event which has a 100% chance of happening is assigned a probability of 1.

All other events can then be assigned a probability between 0 and 1.

page 382 **TEXT** replace first and fourth bullet point on page

- The **number of trials** is the total number of times the experiment is repeated.
- The **relative frequency** of an outcome is the frequency of that outcome divided by the total number of trials.

page 382 **TEXT** replace bullet points under the line “So, for the last tin can example:”

- the number of trials is 250 and the outcomes are *ends* and *sides*
- the frequency of *ends* is 37 and *sides* is 213
- the relative frequency of *ends* is $\frac{37}{250} = 0.148$ and *sides* is $\frac{213}{250} = 0.852$.

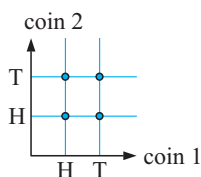
page 382 **TEXT** replace second paragraph under heading “**EXPERIMENTAL PROBABILITY**”

The chance of a can of this shape finishing on its end is the relative frequency found by experimentation.

page 384 **TEXT** replace paragraph under heading “**COINS**”

When a **coin** is tossed there are two possible sides that could show upwards: the *head* (usually the head of a monarch, president or leader) and the *tail* (the other side of the coin). We would expect a head (H) and a tail (T) to have equal chance of occurring, i.e., we expect each to occur 50% of the time. So,

page 388 **EXAMPLE 3** solution correct labels on diagram:



page 390 **TEXT** replace two blue highlight boxes and text between them

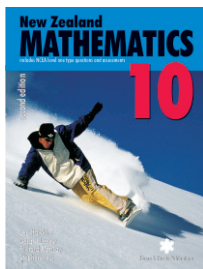
The **theoretical probability** of a particular event is the chance of that event occurring in any trial of the experiment.

Consider the event of getting a result of *6 or more* from one spin of the octagonal spinner. There are three favourable outcomes (6, 7 or 8) out of the eight possible outcomes, and each of these is equally likely to occur.

So, $\Pr(6 \text{ or more}) = \frac{3}{8}$

In general, for an event E containing **equally likely** possible results:

$$\Pr(E) = \frac{\text{the number of outcomes of the event E}}{\text{the total number of possible outcomes}}.$$



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page 402 **ANSWERS EXERCISE 2B**

3 c ono mano kotahi rau

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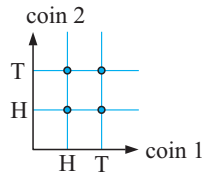
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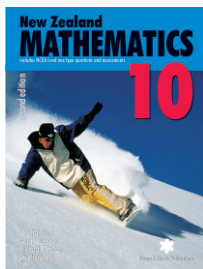
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page 434 **SECTION 14D** Demo no longer supported, icon removed. (Adobe Flash Player)

page 440 **EXAMPLE 14** Animation no longer supported, icon removed. (Adobe Flash Player)
