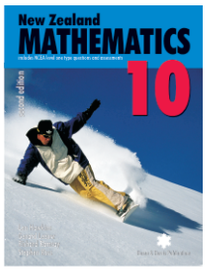


ERRATA

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

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

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

b (middle line)

$$= \frac{{}^{1}\cancel{3} \times {}^{1}\cancel{m}}{{}_{1}\cancel{m} \times \cancel{6}_{2}}$$

c (middle line)

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

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

a

$$\frac{x}{3} \div \frac{x}{4}$$

$$= {}^{1}\cancel{x} \div \frac{4}{\cancel{x}_{1}}$$

$$= \frac{4}{3}$$

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 $\frac{213}{250} = 0.852$.

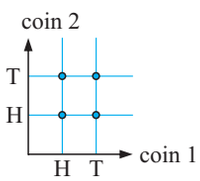
page 382 **TEXT** replace second paragraph under heading "**EXPERIMENTAL PROBABILITY**"

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

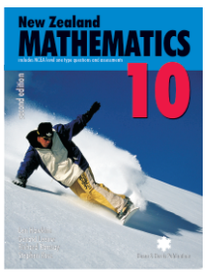
The **theoretical probability** of a particular event is the chance of that event occurring in any trial of the experiment.

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:

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



ERRATA

NEW ZEALAND MATHEMATICS 10

(2nd edition)

Second edition - 2005/2007 reprint

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5						

page 402 **ANSWERS EXERCISE 2B**

3 **c** ono mano kotahi rau

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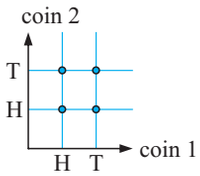

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