

Tauanga B — Statistics Items B

Approach: Independent

Focus: Probability and statistics.

Resources: None.

Questions/instructions

1. In a bag of marbles, $\frac{1}{2}$ are red, $\frac{1}{4}$ are blue, $\frac{1}{6}$ are green, and $\frac{1}{12}$ are yellow. If a marble is taken from the bag without looking, it is most likely to be:

I roto i tētahi pēke māpere, he $\frac{1}{2}$ whero, he $\frac{1}{4}$ kahurangi, he $\frac{1}{6}$ kākāriki me he $\frac{1}{12}$ kōwhai. Mēnā ka tangohia tētahi māpere i te pēke, ā, kāhore koe i te kite, kāore e kore ka tūpono:

- A** red he whero
- B** blue he kahurangi
- C** green he kākāriki
- D** yellow he kōwhai

	% responses	
	GEd	MI
A	53	23

2. Here are the ages of five children:

13, 8, 6, 4, 4.

What is the average (mean) age of these children?

Anei ngā tau o ngā tamariki:

13, 8, 6, 4, 4.

E hia te pakeke o te tau toharite [average - mean] o ēnei tamariki?

7	25	5
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3. Maria made a survey of the students in her class. She found that 60% of the students know how to use one brand of computer, and 40% knew how to use a different brand of computer. She said that because it added up to 100%, it meant that everybody in the class knew how to use a computer.

Explain to Maria why she is right or wrong. If possible, use a diagram.

I whakahaeretia e Maria he tirohanga o ngā ākonga i tōna karaehe. I kitea e ia e 60% o ngā ākonga i mōhio ki te whakamahi i tētahi momo rorohiko. E 40% i mōhio ki te whakamahi i tētahi atu momo rerekē. Ki tāna kī, nō te mea ka tapiritia ēnei ōrau ka eke ki te 100%, ko te tikanga e mōhio ana te katoa o tōna karaehe ki te whakamahi rorohiko. Whakamāramatia ki a Maria he aha i tika ai ia, i hē ai rānei. Ki te taea, whakamāramatia mā tētahi hoahoa.

Clear explanation that

Maria is wrong:

	% responses	
	GEd	MI
with diagram	0	0
without diagram	0	0

Commentary

Because of difficulties with communicating these statistical concepts in Māori, comparisons of performance are not appropriate. Question 2, in particular, was unclear.