

Alien Estimates



You need a classmate a calculator



Activity

Ben and Eseta are playing a computer space invader game against Malcolm and Rongomai. Ben adds up the teams' scores on a calculator, but sometimes he pushes the wrong buttons by mistake.



Here are Ben's calculations for round 1:

Cyborgs round 1		Martians round 1	
Ben	82 145	Malcolm	61 480
Eseta	45 877	Rongomai	67 952
TOTAL	128 022	TOTAL	123 432

1. Rongomai estimates the totals. She thinks her team won round 1.



$82 + 46 = 128$, so the Cyborgs got about 128 thousand. $61 + 68 = 129$, so our team got about 129 thousand.



Is Rongomai correct? Explain how you know without checking on a calculator.

2. Here are the results for round 2:

Cyborgs round 2		Martians round 2	
Ben	69 034	Malcolm	175 749
Eseta	203 699	Rongomai	95 205
TOTAL		TOTAL	



- a. Follow these steps:
- Work out the totals on a calculator.
 - Write down one total correctly and make a mistake on purpose with the other one.
 - Ask a classmate to estimate whether your totals are correct. Then ask them to explain how they got their estimates.
- b. Discuss the strategies that you could use to do this estimating.

I'm going to reverse two of the digits ...

3. Estimate the total of 302 089 and 139 582. Which digits in each number did you focus on?

