## Revisiting Remainders

## You need: a calculator, a classmate

1. Mei Ling, Kirsty, and Matiu are working out $263 \div 25$.

I get 10.52 on my calculator.
There are 10 lots of $25 \ldots$ that's 250. $263-250=13$
a. Is each of them right in some way? Explain your answer.
b. How does Kirsty's reply of $\frac{13}{25}$ relate to the .52 part of Mei Ling's answer? Discuss this with a classmate.
2. Complete the following division equations.

Write each answer as a whole number with a fraction, a whole number with a decimal, and a whole number with a remainder.
a. $52 \div 10=$
b. $38 \div 4=$
c. $45 \div 6=$
d. $236 \div 50=$
e. $53 \div 8=$
f. $193 \div 20=$
g. $487 \div 25=$
h. $75 \div 9=$
i. $512 \div 9=$
3. Matiu made a table of numbers that have a remainder of 2 when divided by both 3 and 5.

a. Copy Matiu's table and write in the next four numbers that have remainders of 2 when divided by 3 and 5 .
b. Is there a pattern in the numbers you wrote for question a? Explain the pattern.
c. For each "number that works" in your table, predict the decimal answer that would show on a calculator when the number is divided by 3 or 5 (for example, $17 \div 5=3.4$ ). Discuss with a classmate the strategies that you used.

