Revisiting Remainders

You need: a calculator, a classmate

1. Mei Ling, Kirsty, and Matiu are working out 263 ÷ 25.

.ei Ling

I think the remainder is $\frac{13}{25}$.

I get 10.52 on my calculator.

There are 10 lots of 25 ... 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.
- 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 ÷ 10 =	b.	38 ÷ 4 =	с.	45 ÷ 6 =
d.	236 ÷ 50 =	e.	53 ÷ 8 =	f.	193 ÷ 20 =
g.	487 ÷ 25 =	h.	75 ÷ 9 =	i.	512 ÷ 9 =

3. Matiu made a table of numbers that have a remainder of 2 when divided by both 3 and 5.

Divided by	Remainder	Numbers that work	
3 and 5	2	17, 32,	

- **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.