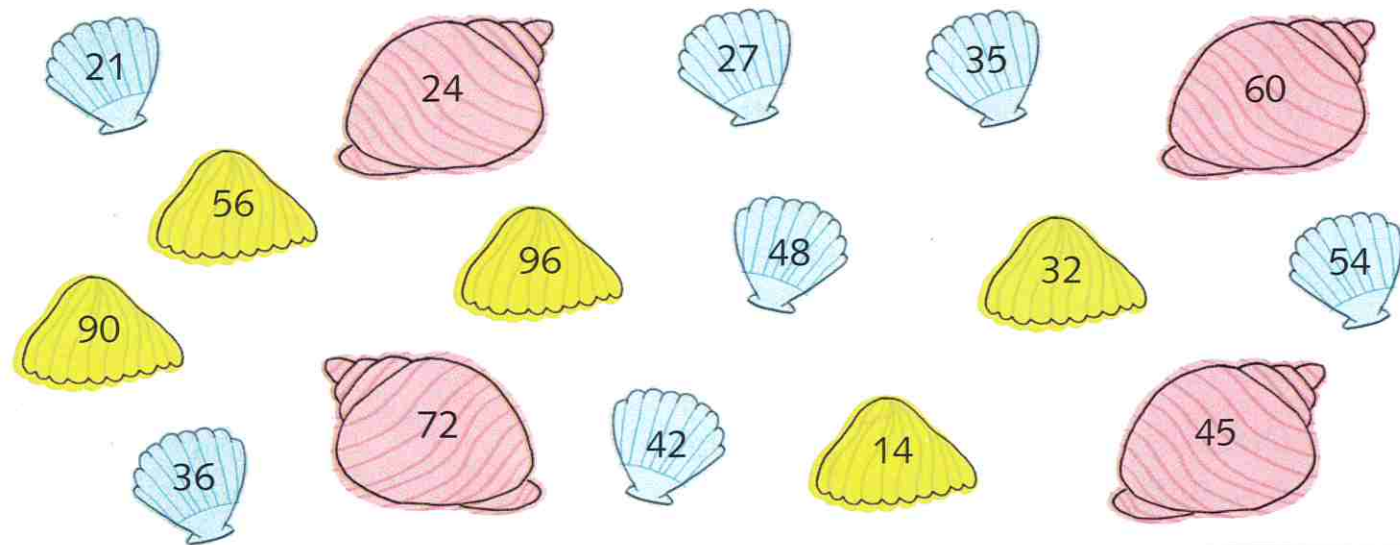


Division $HTO \div O$ with a fraction remainder

Use the formal written method of short division to calculate $O \div O$ with a fraction remainder



The multiples below are all jumbled. Sort them into multiples of 6, 7, 8 and 9. You may use the same multiple more than once.



Example
Multiples of 6: 24, 36, ...

Example
 $276 \div 8 \rightarrow 240 \div 8 = 30$

H	T	O	
3	4	r 4	$= 34\frac{4}{8} = 34\frac{1}{2}$

 $8 \overline{) 276}$

1 For each division calculation write your estimate, then use the formal written method to work out the answer. Record any remainders as a fraction.

- | | | |
|-----------------------|-----------------------|-----------------------|
| a $345 \div 4$ | b $458 \div 8$ | c $672 \div 9$ |
| d $186 \div 4$ | e $491 \div 4$ | f $266 \div 8$ |
| g $375 \div 6$ | h $284 \div 3$ | i $198 \div 5$ |
| j $566 \div 6$ | k $275 \div 3$ | l $873 \div 9$ |



2 Write two calculations for each instruction.

- a** Divide a 3-digit number by 5 to give a remainder of 3.
- b** Divide a 3-digit number by 4 to give a remainder of 2.
- c** Divide a 3-digit number by 7 to give a remainder of 6.



Challenge 3

Write a calculation to match each of the clues.

a When I divide a 3-digit number by 4 my answer has a remainder of $\frac{1}{4}$.

b When I divide a 2-digit number by 6 my answer has a remainder of $\frac{1}{2}$.

c When I divide a 3-digit number by 5 my answer has a remainder of $\frac{3}{5}$.

d When I divide a 3-digit number greater than 300 but less than 360 by 4 my answer has a remainder of $\frac{3}{4}$.

e When I divide a 3-digit odd number between 500 and 700 by 8 my answer has a remainder of $\frac{1}{4}$.

f When I divide a 2-digit number by 8 my answer has a remainder of $\frac{1}{4}$.

g When I divide a 3-digit number greater than 900 by 6 my answer has a remainder of $\frac{1}{3}$.

h When I divide a 3-digit number by 4 my answer has a fractional remainder that can be simplified.

i When I divide the same 3-digit number by 2 different divisors my answer has a remainder of $\frac{1}{3}$.

