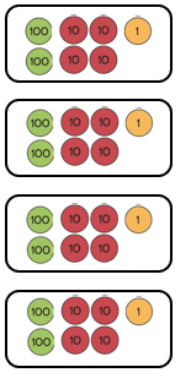
## Short division

**WORKED EXAMPLE**

$$\begin{array}{r} 241 \\ 4\overline{)\,9\,{}^{1}6\,4} \end{array}$$



964 ÷ 4 = 241

9 hundreds shared into 4 groups is 2 hundreds with 1 hundred left over. We need to regroup this into 10 tens.

We now have 16 tens to share into 4 groups. 16 tens shared into 4 groups is 4 in each group. There are no tens remaining.

4 ones shared between 4 groups is 1 one.

In each group there are 2 hundreds, 4 tens and 1 one.

**REHEARSE**

Solve these calculations using short division and place value counters.
Now solve each calculation using long division.

What is the same and what is different about each layout?

753 ÷ 3 568 ÷ 4 805 ÷ 5

**APPLY AND EXPLORE**

Sort the calculations into those which will require regrouping of hundreds to tens, regrouping of tens to ones, or regrouping of both.

| | | |
|---|---|---|
| 786 ÷ 6 | 464 ÷ 4 | 918 ÷ 7 |
| 572 ÷ 5 | 525 ÷ 3 | 984 ÷ 8 |

**REHEARSE**

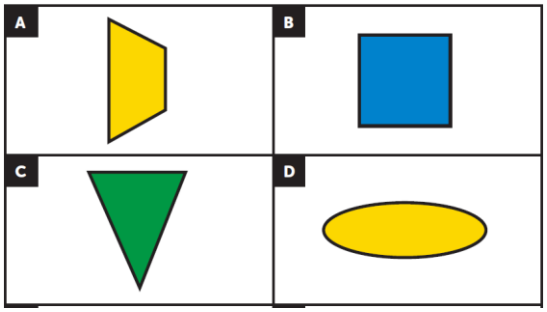
Now solve the calculations.
Which was easiest to solve? Which was trickiest to solve?

## RETRIEVE

**Can I still classify shapes?**

Which of these shapes are **not** quadrilaterals?

What can you say about the shapes?




## REHEARSE

Solve the following calculations using short division.

Set 1:

546 ÷ 6 279 ÷ 3 265 ÷ 4 610 ÷ 8

Set 2:

804 ÷ 4 607 ÷ 3 606 ÷ 6 704 ÷ 7

What do you notice about each set of calculations?

## APPLY AND EXPLORE

The quotient to each of these questions is 156 remainder 2.

What is the dividend in each calculation?

Explain how you have found each dividend.

$$3\overline{)\square\square\square} \quad 1\,5\,6\ \text{r.}2$$

$$4\overline{)\square\square\square} \quad 1\,5\,6\ \text{r.}2$$

$$5\overline{)\square\square\square} \quad 1\,5\,6\ \text{r.}2$$

$$6\overline{)\square\square\square} \quad 1\,5\,6\ \text{r.}2$$