Choice Calculations

You need: a basic calculator (optional), a classmate

ACTIVITY ONE

$+$, $-$, $\times$, and $\div$ are some of the operations that we use on numbers.

Louisa and Kiri are trying to put operation signs in the empty boxes to make this equation correct:

$$4 \,\square\, 3 \,\square\, 6 \,\square\, 2 = 15$$

> $4 + 3 + 6 + 2 = 15$
> That works!

> $4 \times 3 + 6 \div 2 = 15$
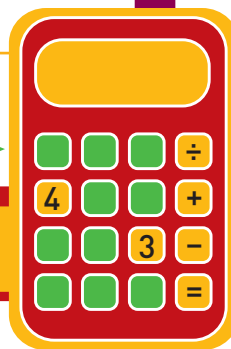> You do the multiplication and division first, so this one works, too!

> No brackets are used, so you must do multiplication and division before you do addition and subtraction.

1. a. Solve the following operation-sign problems:
   i. $3 \bigcirc 6 \bigcirc 2 \bigcirc 9 = 0$
   ii. $4 \bigcirc 6 \bigcirc 3 \bigcirc 6 = 6$
   iii. $2 \bigcirc 3 \bigcirc 3 \bigcirc 2 = 5$
   iv. $8 \bigcirc 4 \bigcirc 2 \bigcirc 1 = 1$
   b. Can you solve any of these problems in more than one way?

2. Make up some missing-operations problems for a classmate to solve.

ACTIVITY TWO

Tariq's calculator carries out operations in the order that they occur. However, his calculator has only these keys working:

Tariq worked out $78 \div 3$ like this: $44 + 34 \div 3 = 26$

1. How can he use his calculator to work out:
   a. 34×6?
   b. $111 \div 3$?
   c. 29×4?

2. Make up some other expressions that Tariq could do on his broken calculator. Give them to a classmate to solve.

Solving operation-sign problems