Mathematics

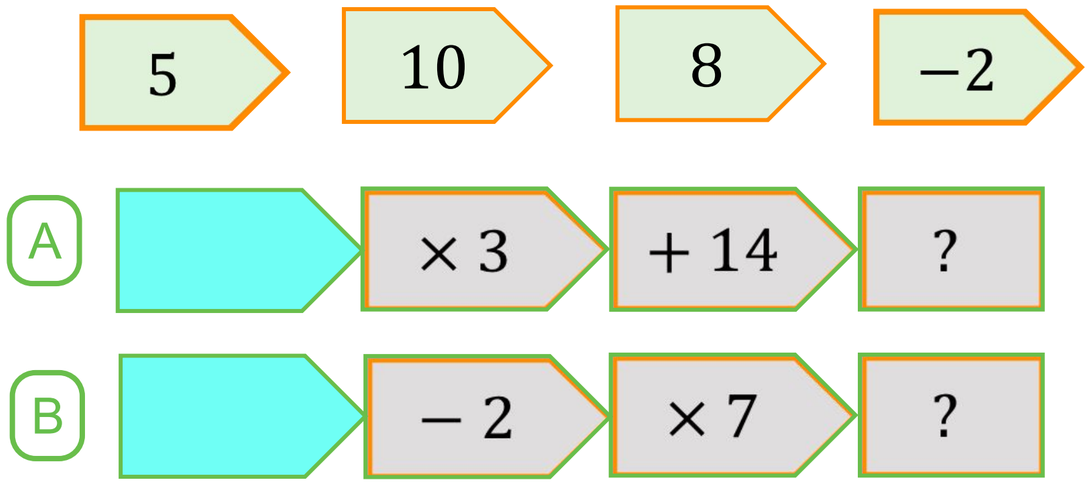
Expressions, equations and inequalities
Algebraic expressions

Independent Task

Ms Jones

Try This

Input **each** of the numbers into **both** of the function machines:



Which had a greater output from the first function machine?

Find a number that has the same output from both function machines.

Independent task

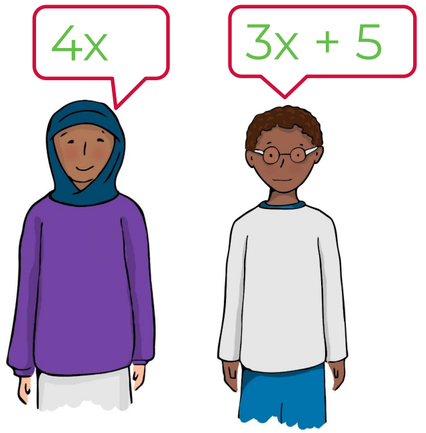
1. Match the cards below into pairs of equivalent expressions.

$3b$	$5 - 3b$	$2b - 3$	$5b$
$5 - 3 \times b$	$3 \times b$	$b \times 5$	$2 \times b - 3$

2. Work out the value of each expression when n = 3.

a) 2n b) n – 3 c) 2n – 10 d) 100 – 10n e) $n^2 + 2n$

3. Look at the two students' expressions.



a) Find three values of x, so that $4x < 3x+5$.

b) Find three values of x, so that $4x > 3x+5$.

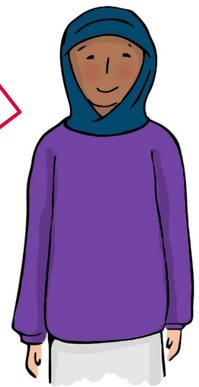
c) Find the values of x, so that $4x = 3x + 5$.

Explore

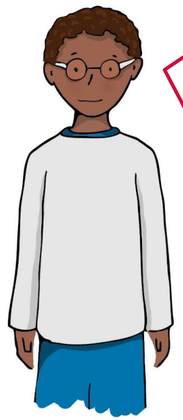
Cala and Xavier have written expressions using the variable b.

Compare their expressions.

The value of my expression is greater when ...



$b + 4$



The value of my expression is greater when ...

$2b$

The expressions are equal in value when ...