

## On the Subject of Algebra

*"Why do we need to study algebra? We'll never use it in real life..." Anybody else remember saying that?*

- The module consists of a number pad and two screens.
- In three stages, the module displays an equation involving the variables  $a$ ,  $b$  and  $c$ , respectively.
- Solve the equation for  $a$ ,  $b$  or  $c$  and enter the answer to progress to the next stage.
- In each equation, the variables  $x$ ,  $y$  and  $z$  may appear. Calculate their values using the columns of the following table:

<EQUATION>

☐

☐

1	2	3	+/-
4	5	6	.
7	8	9	0
Clear		Submit	

☐
☐

$x = n$		$y = i - p$		$z = m + t \times d$	
$n$ = sum of digits in the serial number		$i$ = number of indicators $p$ = number of ports		$m$ = number of modules $t$ = number of AA batteries $d$ = number of D batteries	
3 or more battery holders present?	+2	2 or fewer battery holders present?	-2	No battery holders present?	+3
RJ-45 port present?	-1	Serial port present?	+3	Parallel port present?	-6
Lit BOB indicator present?	+4	Unlit FRQ indicator present?	-5	Lit MSA indicator present?	+2
Serial number contains a vowel?	-3	Sum of the serial number digits is prime?	+4	Sum of the serial number digits is divisible by 3?	+1