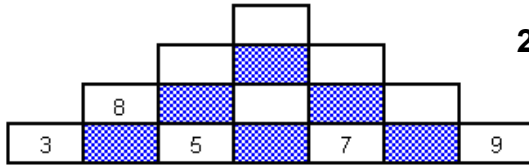


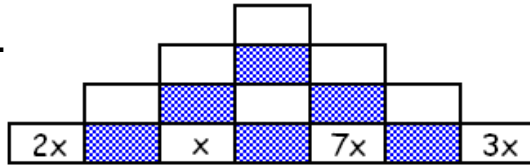
### Task A: Algebra Towers

Fill in the missing numbers and expressions in the towers below. To work out a missing square, you must add the two numbers or expressions below it.

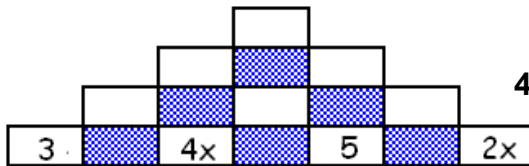
1.



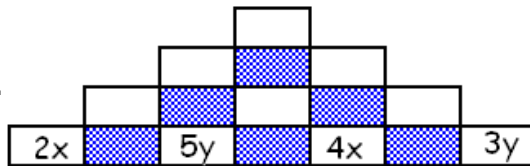
2.



3.



4.



### Task B: Magic Squares

Each row, column and diagonal should add up to the same total.

1.

	$9X+3Y$	$4X+8Y$
		$3X+Y$
		$8X+6Y$
<b>Total =</b>		

2.

$-6Z$	$8Z$	
$4Z$		
<b>Total = 0</b>		

### Task C: Substitution

1) By substituting the letters for numbers, work out the value of the expressions below.

<b>A=1</b>	<b>B=2</b>	<b>C=3</b>	<b>D=5</b>	<b>E=7</b>	<b>F=10</b>	<b>G=24</b>	<b>H=100</b>
------------	------------	------------	------------	------------	-------------	-------------	--------------

- |                |                 |                          |                          |
|----------------|-----------------|--------------------------|--------------------------|
| a) $A + B$     | e) $B \times D$ | i) $G \div B$            | m) $C \times D - E$      |
| b) $F - E$     | f) $F \times E$ | j) $H \div F$            | n) $H - G + E$           |
| c) $B + C + D$ | g) $G \times H$ | k) $B \times C \times D$ | o) $C \times F \div D$   |
| d) $H - G$     | h) $F \div B$   | l) $F \times G + H$      | p) $E \times C \times D$ |

### Extension Question:

Use the values from the last task to work out the value of the expressions below.

- |          |               |               |          |
|----------|---------------|---------------|----------|
| a) $D^2$ | b) $D(B + C)$ | c) $E \div F$ | d) $B^C$ |
|----------|---------------|---------------|----------|