

## Worksheet 6

### Writing and Evaluating Algebraic Expressions

- 1 A number machine changes the input number  $w$  to an output number  $x$  according to a rule.

(a)

Input $w$	8	9	10	4	15
Output $x$	16	18	20	8	30


Write an algebraic expression for  $x$  in terms of  $w$  to describe the rule used by the machine.

$$x = 2w$$

- (b) Complete the table using the rule.

Input $w$	7	12	18	6
Output $x$	14	24	36	12

- 2  wrote a spreadsheet programme that changed the input number  $k$  using the rule  $\frac{k}{5}$ .

Complete the table using 's rule.

Input $k$	Output
5	1
10	2
35	7
100	20
45	9