

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.

$x =$

- (b) Complete the table using the rule.

| | | | | |
|------------|---|----|----|---|
| Input w | 7 | | | 6 |
| Output x | | 24 | 36 | |

- 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 | |
| 10 | |
| | 7 |
| | 20 |
| 45 | |