

## Essential Skills 17

The questions in this series of worksheets appear frequently.

These are the GIFTS you must take to succeed



### Functional Notation (Non Calculator)

- |     |    |                       |           |     |        |     |         |
|-----|----|-----------------------|-----------|-----|--------|-----|---------|
| 1.  | If | $f(x) = 3x - 4$       | Evaluate: | (a) | $f(2)$ | (b) | $f(-1)$ |
| 2.  | If | $f(x) = x^2 - 1$      | Evaluate: | (a) | $f(4)$ | (b) | $f(-2)$ |
| 3.  | If | $f(x) = 2x^3 + 3$     | Evaluate: | (a) | $f(3)$ | (b) | $f(-1)$ |
| 4.  | If | $f(x) = 3x^2$         | Evaluate: | (a) | $f(5)$ | (b) | $f(-4)$ |
| 5.  | If | $f(x) = 3x^2 - 1$     | Evaluate: | (a) | $f(4)$ | (b) | $f(-2)$ |
| 6.  | If | $f(x) = 7 - x$        | Evaluate: | (a) | $f(3)$ | (b) | $f(-7)$ |
| 7.  | If | $f(x) = 5 - x^2$      | Evaluate: | (a) | $f(2)$ | (b) | $f(-3)$ |
| 8.  | If | $f(x) = -x^3$         | Evaluate: | (a) | $f(1)$ | (b) | $f(-4)$ |
| 9.  | If | $f(x) = 4 + x^2$      | Evaluate: | (a) | $f(5)$ | (b) | $f(-3)$ |
| 10. | If | $f(x) = 3 + 2x - x^3$ | Evaluate: | (a) | $f(2)$ | (b) | $f(-1)$ |

### APPLYING QUESTION

A function is defined as  $h(x) = 24 - 5x$

- Evaluate  $h(-3)$
- Express  $h(p - 4)$  in its simplest form.
- Given that  $h(t) = 59$ , find the value of  $t$ .
- Solve  $3x + 9 = 2h(x)$

