

Let f be the function whose graph is shown on the screen.

- 1 What is $f(11)$?

Since $(11, 1)$ is on the graph,

$$f(11) = 1.$$

- 2 For what values of x is it true that $f(x) > 0$?

The portion of the graph above the x -axis corresponds to those x -coordinates such that $f(x) > 0$. This is the portion between -3 and 6 or beyond 10 ; the latter subportion of course only goes to 11 . So the relevant values of x are those such that

$$-3 < x < 6 \text{ or } 10 < x \leq 11.$$

- 3 Solve the equation $f(x) = 3$.

Since $(0, 3)$ and $(4, 3)$ are on the graph but no other example of $(x, 3)$ is on the graph,

$$x = 0 \text{ or } x = 4.$$