

## Worked example

The function  $f(x)$  is defined by

$$f: x \rightarrow \begin{cases} 2 - 5x, & x < 1 \\ x^2 - 3, & x \geq 1 \end{cases}$$

- Sketch  $y = f(x)$ , and state the range of  $f(x)$ .
- Solve  $f(x) = 22$

## Your turn

The function  $f(x)$  is defined by

$$f: x \rightarrow \begin{cases} 5 - 2x, & x < 1 \\ x^2 + 3, & x \geq 1 \end{cases}$$

- Sketch  $y = f(x)$ , and state the range of  $f(x)$ .
- Solve  $f(x) = 19$

- Sketch ;  $f(x) > 3$
- $x = 4, x = -7$

