Defining variables

We can define a variable for use later in the document by using the equivalence (`\equiv`) symbol inside an equation:

$$x \equiv \sqrt{16} \qquad\qquad \equiv \text{(1)}$$

Note the icon next to the equation; `qed` did not perform any tests but instead stored the expression for x. We can then reference x in subsequent equations, and `qed` will recognize it and automatically substitute its definition:

$$x = 4 \qquad\qquad \blacksquare \text{(2)}$$

For convenience, users can also use the starred version of the equivalence commmand (`\equiv*`), which behaves in the same way but typesets as a regular equality symbol:

$$y = \sqrt{25} \qquad\qquad \equiv \text{(3)}$$

This works just as before:

$$y = 5 \qquad\qquad \blacksquare \text{(4)}$$