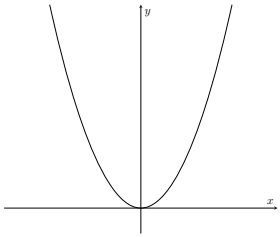
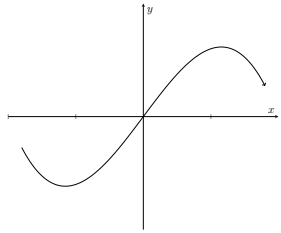
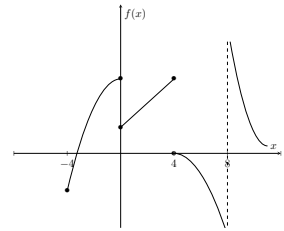
CONTINOUS AND DISCONTIOUS FUNCTIONS:

CONTINUOUS FUNCTION





DISCONTINUOUS FUNCTION



A function $f(x)$ is called continuous or a continuous function if it is continuous at each point in its domain (i.e. if $f(x)$ is continuous at $x = c$ for every choice of c in the domain of the function).

A function $f(x)$ is called discontinuous if there are points that are isolated from each other on a graph.

1.1 WORKED EXAMPLE

Draw a continuous and discontinuous graph and explain the difference

1.2 WORKED EXAMPLE

For what values of x is the function $y = \frac{1}{x-3}$:

a) continuous

b) discontinuous