## Average Rate of Change

## Question

Over which of the following intervals do the functions $f(x)=x$ and $g(x)=x^{2}$ have the same average rate of change.
(a) $(-\infty, \infty)$
(b) $[0,1]$
(c) $[-1,0]$
(d) There are no intervals over which the functions $f$ and $g$ have the same average rate of change.

Answer: (b)

