



## Instantaneous Rate of Change - Close Points to Slope Approximation

**1**

$y = \cos(x)$

Estimate the instantaneous rate of change at the marked point by adding a second point very near to it. Note: the y-axis may not be the same scale as the x-axis.

A	B
about -1	about -1.5

**2**

$y = 2\cos(x)$

Estimate the instantaneous rate of change at the marked point by adding a second point very near to it. Note: the y-axis may not be the same scale as the x-axis.

A	B
about -0.5	about 0.5

**3**

$y = 2\sin(x)$

Estimate the instantaneous rate of change at the marked point by adding a second point very near to it. Note: the y-axis may not be the same scale as the x-axis.

A	B
about -1	about 0.5

**4**

$y = 2x^2$

Estimate the instantaneous rate of change at the marked point by adding a second point very near to it. Note: the y-axis may not be the same scale as the x-axis.

A	B
about 1	about 0.5

**5**

$y = x^2$

Estimate the instantaneous rate of change at the marked point by adding a second point very near to it. Note: the y-axis may not be the same scale as the x-axis.

A	B
about 1	about 0.5

**6**

$y = 2/x$

Estimate the instantaneous rate of change at the marked point by adding a second point very near to it. Note: the y-axis may not be the same scale as the x-axis.

A	B
about -0.5	about 1

**7**

$y = x^2$

Estimate the instantaneous rate of change at the marked point by adding a second point very near to it. Note: the y-axis may not be the same scale as the x-axis.

A	B
about -0.5	about 1

**8**

$y = 2\cos(x)$

Estimate the instantaneous rate of change at the marked point by adding a second point very near to it. Note: the y-axis may not be the same scale as the x-axis.

A	B
about -1.8	about -0.5