Name

Average Rate of Change - Function and Point plus Delta to Slope

1 Find the average rate of change of this function from this point over an interval of width h.

$$f(x) = 2\sqrt{x}$$
$$f(2) = 2.8$$
$$f(2+h) = 2\sqrt{2+h}$$

A	$\frac{2}{\sqrt{2+h}}$	B	$\frac{2}{\sqrt{2+h}-\sqrt{2}}$
C	$\frac{2}{\sqrt{2+h}+\sqrt{2}}$	D	$\frac{2}{2\sqrt{2}}$

2 Find the average rate of change of this function from this point over an interval of width h.

$$f(x) = x^3$$
$$f(1) = 1$$
$$f(1+h) = (1+h)^3$$

A	$3+3h+h^2$	B	$3+h$
C	$3+3h$	D	$3+3h-h^2$

3 Find the average rate of change of this function from this point over an interval of width h.

$$f(x) = 2x - 3$$
$$f(0) = -3$$
$$f(0+h) = 2(0+h) - 3$$

A	$2+h$	B	2
C	$2h$	D	4

4 Find the average rate of change of this function from this point over an interval of width h.

$$f(x) = 2x - 1$$
$$f(-2) = -5$$
$$f(-2+h) = 2(-2+h) - 1$$

A	$2+h$	B	4
C	$2h$	D	2

5 Find the average rate of change of this function from this point over an interval of width h.

$$f(x) = 2x - 1$$
$$f(-1) = -3$$
$$f(-1+h) = 2(-1+h) - 1$$

A	$2+h$	B	$2h$
C	4	D	2

6 Find the average rate of change of this function from this point over an interval of width h.

$$f(x) = 3x + 1$$
$$f(-1) = -2$$
$$f(-1+h) = 3(-1+h) + 1$$

A	3	B	6
C	$3h$	D	$3+h$

7 Find the average rate of change of this function from this point over an interval of width h.

$$f(x) = 2\sqrt{x}$$
$$f(1) = 2$$
$$f(1+h) = 2\sqrt{1+h}$$

A	$\frac{2}{\sqrt{1+h}}$	B	$\frac{2}{\sqrt{1+h}-\sqrt{1}}$
C	$\frac{2}{\sqrt{1+h}+\sqrt{1}}$	D	$\frac{2}{2\sqrt{1}}$

8 Find the average rate of change of this function from this point over an interval of width h.

$$f(x) = \sqrt{x}$$
$$f(1) = 1$$
$$f(1+h) = \sqrt{1+h}$$

A	$\frac{1}{\sqrt{1+h}-\sqrt{1}}$	B	$\frac{1}{2\sqrt{1}}$
C	$\frac{1}{\sqrt{1+h}}$	D	$\frac{1}{\sqrt{1+h}+\sqrt{1}}$