



New Maths GCSE: A9 - Gradient of Parallel and Perpendicular Lines

Name:.....

Date:.....

$y = 3x + 4$

A line parallel to this would have gradient:

A 3 **B** 4

C $3x$ **D** $-\frac{1}{3}$

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

$y = 2x - 6$

A line perpendicular to this would have gradient:

A $-\frac{1}{2}$ **B** 2

C -2 **D** $\frac{1}{2}$

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

$y = \frac{1}{3}x + 4$

A line parallel to this would have gradient:

A 3 **B** -3

C $\frac{1}{3}x$ **D** $\frac{1}{3}$

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

$$y = \frac{1}{4}x - 1$$

A line perpendicular to this would have gradient:

A $\frac{1}{4}$

B -4

C 4

D $-\frac{1}{4}$

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

$$y = 2 - x$$

A line parallel to this would have gradient:

A x

B 1

C -1

D $-x$

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

$$y = 2 - 3x$$

A line perpendicular to this would have gradient:

A $-\frac{1}{3}$

B 3

C -3

D $\frac{1}{3}$

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

$$y = 5 - \frac{2}{3}x$$

A line parallel to this would have gradient:

A 5

B $\frac{3}{2}x$

C $\frac{2}{3}x$

D $-\frac{2}{3}$

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

$$y = 7 - \frac{1}{5}x$$

A line perpendicular to this would have gradient:

A $\frac{1}{5}$

B -5

C 5

D $-\frac{1}{5}$

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

$$y = 7 - \frac{3}{4}x$$

A line perpendicular to this would have gradient:

A $-\frac{3}{4}$

B $\frac{3}{4}$

C $-\frac{4}{3}$

D $\frac{4}{3}$

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

$$3y = 1 - 6x$$

A line parallel to this would have gradient:

A $-\frac{1}{2}$

B 6

C -6

D -2

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....