

**Straight Lines - (Parallel and Perpendicular Lines) www.m4ths.com**

(1) What is the gradient of the line  $y = 3x + 1$  ?

(2) What is the gradient of the line  $y = 4 - 2x$  ?

(3) What is the gradient of the line  $2y + 10x = 13$  ?

(4) A line has a gradient of 5 and passes through the point (0,6) What is the equation of the line?

A  $y = 5x$       B  $y = 5x + 6$       C  $y = 6x + 5$       D Other

(5) Write down the gradient of a line parallel to the line with equation  $y = -6x + 7$

(6) Write down the gradient of a line parallel to the line with equation  $5x - 10y = 7$

(7) Write down the gradient of a line perpendicular to the line with equation  $y = 8x - 17$

(8) Write down the gradient of a line perpendicular to the line with equation  $4y + 2x = 3$

(9) The equation of the line parallel to the line  $y = 4x + 1$  passing through the point (2,4) is

A  $y = 4x + 4$       B  $y = 4x + 2$       C  $y = 4x$       D Other

(10) The equation of the line perpendicular to the line  $y = 2x - 3$  passing through the point (4,3) is

A  $y = \frac{1}{2}x + 2$       B  $y = -\frac{1}{2}x + 3$       C  $y = -2x$       D Other

(11) The equation of the line through the point (4,7) and (10,25) is:

A  $y = 3x - 5$       B  $y = 3x + 7$       C  $y = \frac{1}{3x} + 4$       D Other

(12) The equation of the line perpendicular to  $8y - 6x - 3 = 0$  passes through the origin (0,0). What is the equation of the line?

A  $y = \frac{3}{4}x$       B  $y = -\frac{3}{4}x$       C  $y = \frac{4}{3}x$       D Other