



Straight Line Graphs – Questions

Q1) Work out the gradient of the straight line passing through these points.

a) $A = (2, 5), B = (3, 7)$

c) $A = (-3, -5), B = (4, 7)$

b) $P = (-1, 0), Q = (0, -1)$

d) $R = (4, -2), S = (-3, -2)$

Q2) Find the equation of the following straight lines.

a) Gradient = 4 and passing through the point (1, 3)

b) Gradient = -1 and passing through the point (-1, 4)

Q3) Work out the equation of the straight line passing through these points.

a) $C = (2, -4), D = (3, 7)$

b) $R = (2, -3), S = (4, -2)$

Q4) Find the points where the following straight lines intercept the co-ordinate axes.

a) $y = 3x - 5$

c) $2y = 4x + 6$

b) $y = -2x + 7$

d) $\frac{1}{2}y = -3x - 5$

Q5) Work out the gradient and y-intercept of the following straight lines.

a) $y = 2 - 6x$

c) $y - 8 = 2x$

b) $2y = 4x + 8$

d) $3y = -x + 9$

Q6) Work out the point where the following straight lines intercept the x axis.

a) $2y = 4 - 8x$

c) $5x = -2y$

b) $9 - 4y = 3x$

d) $3x = 6 - 2y$



Straight Line Graphs – Solutions

Q1) a) $m_{AB} = 1$

b) $m_{PQ} = 1$

c) $m_{AB} = \frac{12}{7}$

d) $m_{RS} = 0$

Q2) a) $y = 4x - 1$

b) $y = -x + 3$

Q3) a) $y = 11x - 26$

b) $y = \frac{1}{2}x - \frac{3}{2}$

Q4) a) y-intercept = $(0, -5)$

x-intercept = $(\frac{5}{3}, 0)$

b) y-intercept = $(0, 7)$

x-intercept = $(\frac{7}{2}, 0)$

c) y-intercept = $(0, 3)$

x-intercept = $(-\frac{3}{2}, 0)$

d) y-intercept = $(0, -10)$

x-intercept = $(-\frac{5}{3}, 0)$

Q5) a) Gradient = -6

y-intercept = 2

b) Gradient = 2

y-intercept = 4

c) Gradient = 2

y-intercept = 8

d) Gradient = $-\frac{1}{3}$

y-intercept = 3

Q6) a) x-intercept = $(\frac{1}{2}, 0)$

b) x-intercept = $(3, 0)$

c) x-intercept = $(0, 0)$

d) x-intercept = $(2, 0)$