N5 Maths: Straight Line

Q1 Find the equation of the straight line through the given point with the given gradient.

a) $(3, 7)$ $m = 2$

b) $(1, -2)$ $m = 3$

c) $(6, -1)$ $m = 1$

d) $(1, 6)$ $m = 0$

e) $(3, 1)$ $m = -2$

f) $(1, 5)$ $m = -4$

g) $(-1, -1)$ $m = -4$

h) $(0, -1)$ $m = 3$

i) $(-2, 6)$ $m = -3$

Q2 Find the equation of the straight line through the given point with the given gradient.

a) $(4, 1)$ $m = \frac{1}{2}$

b) $(4, -3)$ $m = \frac{3}{2}$

c) $(5, 3)$ $m = -\frac{1}{2}$

d) $(2, -1)$ $m = -\frac{4}{3}$

e) $(-4, 2)$ $m = \frac{2}{3}$

f) $(-5, 0)$ $m = -\frac{7}{4}$

g) $(1, 7)$ $m = \frac{2}{5}$

h) $(-3, -1)$ $m = \frac{1}{4}$

i) $(-3, -2)$ $m = -\frac{4}{5}$

Q3 Find the equation of the straight line through the two given points.

a) $(1, 3)$ and $(3, 7)$

b) $(2, -1)$ and $(5, 8)$

c) $(-1, 7)$ and $(2, 4)$

d) $(0, -1)$ and $(-3, 5)$

e) $(3, -1)$ and $(1, -9)$

f) $(-4, -3)$ and $(-2, 7)$

g) $(-5, -2)$ and $(3, 6)$

h) $(1, -2)$ and $(5, -2)$

i) $(-1, 0)$ and $(-2, 3)$

Q4 Find the equation of the straight line joining the two given points.

a) $(4, 5)$ and $(6, 6)$

b) $(1, -1)$ and $(3, 2)$

c) $(1, 6)$ and $(-2, 4)$

d) $(1, -2)$ and $(-3, 3)$

e) $(2, 0)$ and $(5, -5)$

f) $(-1, 3)$ and $(-4, 7)$

g) $(-5, -2)$ and $(3, 1)$

h) $(1, -2)$ and $(4, -3)$

i) $(-1, 0)$ and $(-4, 2)$

Q5 Each of the following equations represents a straight line. Identify the gradient and y-intercept.

a) $2x + y = 3$

b) $3x + y + 1 = 0$

c) $-2x + y - 3 = 0$

d) $2y = x + 4$

e) $3y = -x + 3$

f) $-y = 2x + 3$

g) $-2y = x + 6$

h) $-3y = -x + 12$

i) $-2y = 2x - 3$

j) $2y = 3x + 6$

k) $3y = -2x + 3$

l) $-4y = 3x - 1$

m) $5y = 4x$

n) $4y = 5$

o) $x - y = 0$

p) $7y + 4x = 0$

q) $2x - 3y = 0$

r) $2x + 3y = 0$

s) $-2x + 5y = 0$

t) $2x + 3y = 1$

u) $4x + 5y = 2$

v) $-7x + 4y = 3$

w) $7x + 3y + 4 = 0$

x) $3x - 2y - 5 = 0$