1. Write down the straight line equation from the information given.

   (m – gradient, i – intercept on y-axis)

   (a) m = 3, i = 4   (b) m = 2, i = −1   (c) m = 5, i = 3

   (d) m = −2, i = 1   (e) m = 4, i = −3   (f) m = 1, i = −1

   (g) m = 7, i = −4   (h) m = −2, i = −5   (i) m = 2, i = −11

   (j) m = 6, i = 7   (k) m = 9, i = −10   (l) m = −2, i = −9

2. For each equation write down the gradient and intercept on the <u>y-axis</u>.

   (a) $y = 3x + 4$ (b) $y = x - 1$ (c) $y = 2x - 5$

   (d) $y = 5x + 1$ (e) $y = x - 6$ (f) $y = 4x + 7$

   (g) $y = 3x - 9$ (h) $y = 2(x - 4)$ (i) $y = 5(x - 3)$

   (j) $y = 3(2x - 1)$ (k) $2y = 2x - 3$ (l) $3y = 6x + 1$

3. Find the equation of the line that passes through the following points.

   (a) $(0,0)$ $(2,3)$ (b) $(0,0)$ $(-3,-4)$ (c) $(0,0)$ $(-2,1)$

   (d) $(1,0)$ $(-3,1)$ (e) $(1,0)$ $(2,-1)$ (f) $(1,0)$ $(-1,2)$

   (g) $(-1,0)$ $(1,4)$ (h) $(-3,-2)$ $(2,2)$ (i) $(2,-1)$ $(3,5)$

   (j) $(-1,-1)$ $(-2,-6)$ (k) $(-6,-2)$ $(-4,-7)$ (l) $(-1,-7)$ $(-9,-10)$

4. For each equation write down the intercept on the <u>x-axis</u>.

   (a) $y = x + 6$ (b) $y = 2x - 8$ (c) $y = 3x - 9$
   (d) $y = x + 3$ (e) $y = 5x - 2$ (f) $y = 3 - 2x$
   (g) $y = 5 - x$ (h) $2y = 4 + 3x$ (i) $3y = 2(3 - 2x)$

1.

(a) $y = 3x + 4$ (b) $y = 2x - 1$ (c) $y = 5x + 3$

(d) $y = -2x + 1$ (e) $y = 4x - 3$ (f) $y = x - 1$

(g) $y = 7x - 4$ (h) $y = -2x - 5$ (i) $y = 2x - 11$

(j) $y = 6x + 7$ (k) $y = 9x - 10$ (l) $y = -2x - 9$

2.

(a) 3, 4   (b) 1, -1   (c) 2, -5

(d) 5, 1   (e) 1, -6   (f) 4, 7

(g) 3, -9   (h) 2, -8   (i) 5, -15

(j) 6, -3   (k) 1, $-1\frac{1}{2}$ (l) 2, $\frac{1}{3}$

3.

(a) $y = \frac{3}{2}x$ (b) $y = \frac{4}{3}x$ (c) $y = -\frac{1}{2}x$

(d) $y = -\frac{1}{4}x + \frac{1}{4}$ (e) $y = -x + 1$ (f) $y = -x + 1$

(g) $y = 2x + 2$ (h) $y = \frac{4}{5}x + \frac{2}{5}$ (i) $y = 6x - 13$

(j) $y = 5x + 4$ (k) $y = -\frac{5}{2}x - 17$ (l) $y = \frac{3}{8}x - 6\frac{5}{8}$

4.

(a) -6 (b) 4   (c) 3

(d) -3 (e) $\frac{2}{5}$ (f) $1\frac{1}{2}$

(g) 5   (h) $-1\frac{1}{3}$ (i) $1\frac{1}{2}$