

National 4 Homework Exercise 24 Change of Subject

1. Complete all calculations below **without a calculator**. Show all working!

(a) 3.54×600 (b) $13.7 \div 40$ (c) $\frac{2}{5}$ of 780g [4]

2. Make x the subject of the following formulae.

(a) $x + 2 = p$ (b) $f - x = g$ (c) $m = x + 3$ [4]

3. Make x the subject of the following formulae.

(a) $y = 3x$ (b) $y = -7x$ (c) $y = 3x + 2$ [12]
(d) $p + 8x = h$ (e) $a - 6x = b$ (f) $b - 3xyz = c$

4. Change the subject of the formula to the letter in brackets.

(a) $V = IR$ (R) (b) $V = lbt$ (b) (c) $E = mgh$ (m) [3]

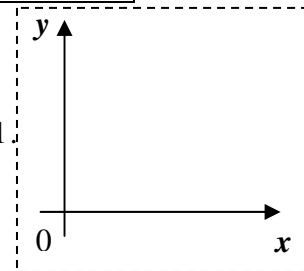


5. (a) Complete the table for the line $y = 3x + 1$.

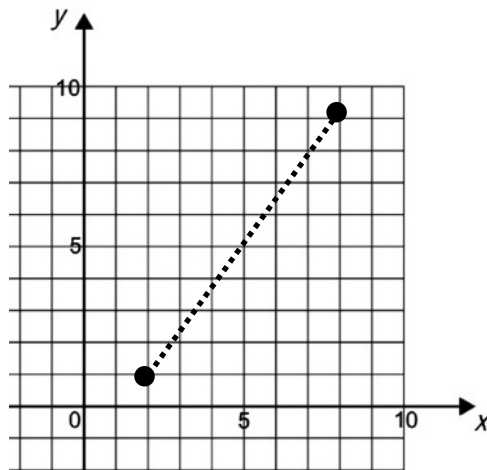
x	0	1	2	3
$y = 3x +$				

(b) List the coordinates of the 4 points.

(c) Draw a set of axes as shown and plot the line $y = 3x + 1$.



6. On the grid shown, the end-points of a line are (2, 1) and (8, 9). Calculate the length of the dotted line. [7]



[4]