



Year 8 Maths Homework Sheet No.13

To be completed on loose-leaf paper.

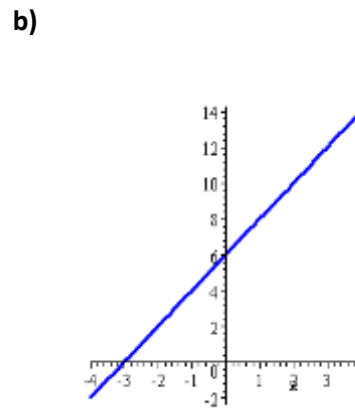
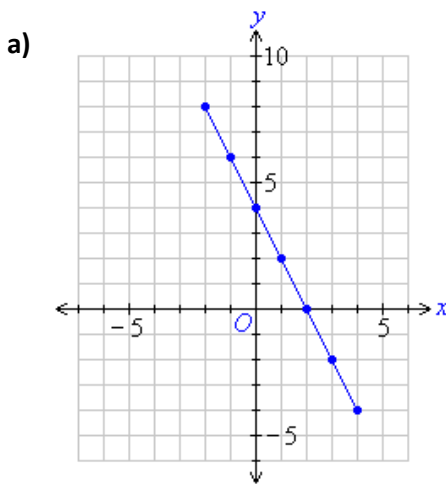


Aims:

- To provide ongoing revision of skills and concepts
- To develop procedural knowledge and fluency.

Need help? →

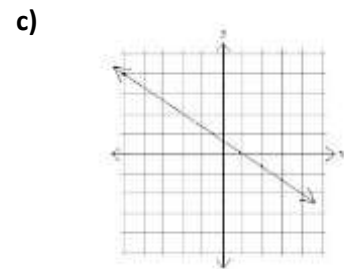
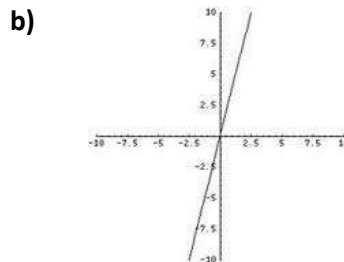
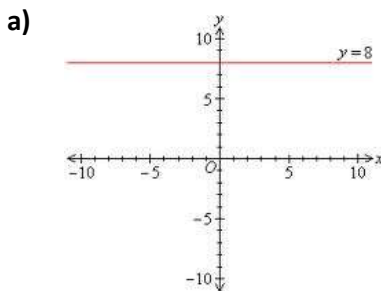
1. Calculate the gradient of the following graphs using the formula $m = \frac{\text{rise}}{\text{run}}$
 What is the y-intercept for each graph?
 What is the formula for each graph?



2. State the gradient and y-intercept of the following linear equations;

- a) $y = 2x + 5$ b) $y = -5x - 6$ c) $4x + 2 = y$ d) $2x - 5 = y$ e) $y = -6x$

3. State the gradient type of the following graphs:



4) Plot the following points on a cartesian graph.

X	-2	-1	0	1	2	3	4
Y	8	6	4	2	0	-2	-4

Does it create a linear graph?

What is the equation for the line?

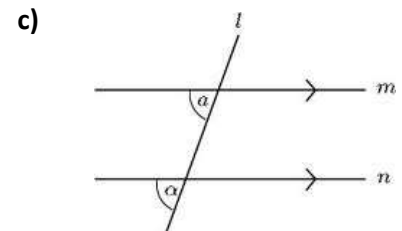
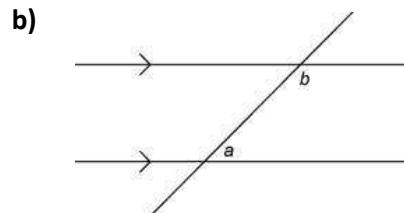
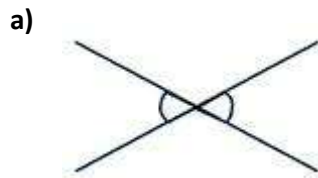
5) Find the next set of co-ordinates in the following patterns:

a) $(-3,-6)$ $(-2,-4)$ $(-1,-2)$ $(0,0)$

b) $(-3,-9)$ $(-2,-6)$ $(-1,-3)$ $(0,0)$

c) $(-5,-7)$ $(-4,-6)$ $(-3,-5)$ $(-2,-4)$

6) State the types of angles



ANSWERS: You must show the mathematics used to get these answers. Simply writing the answer is not enough.

Questions 1a) $m = -2$, $y\text{-int} = 4$, $y = -2x + 4$, 1b) $m = 2$, $y\text{-int} = 6$, $y = 2x + 6$, 2a) $m = 2$, $y\text{-int} = 5$, 2b) $m = -5$, $y\text{-int} = -6$,
2c) $m = 4$, $y\text{-int} = 2$, 2d) $m = 2$, $y\text{-int} = -5$, 2e) $m = -6$, $y\text{-int} = 0$, 3a) zero, 3b) positive, 3c) negative, 4) $y = -2x + 4$,
Q5a) (1,2), 5b) (1,3), 5c) (-1,-3), 6a) opposite, 6b) co-interior, 6c) corresponding .