

Equation of a Line
S1-S3, National 4

For each question below

- (a) Copy and complete the table for the given line
 (b) Draw the line on a coordinate graph
 (c) Write down the gradient of the line

For part b. you are strongly encouraged to check your answer using desmos.com. See your teacher if you need help using desmos.

1. $y = x + 5$

x	3	0	-2
y	8	5	3

gradient = 1

2. $y = x - 3$

x	7	0	-3
y	4	-3	-6

gradient = 1

3. $y = 2x$

x	5	1	-4
y	10	2	-8

gradient = 2

4. $y = 4x$

x	1	0	-2
y	4	0	-8

gradient = 4

5. $y = 2x - 5$

x	4	0	-1
y	3	-5	-7

gradient = 2

6. $y = 3x + 1$

x	3	0	-3
y	10	1	-8

gradient = 3

7. $y = 4 + 4x$

x	1	-1	-3
y	8	0	-8

gradient = 4

8. $y = 3 - 2x$

x	5	0	-3
y			

gradient = -2

9. $y = -x + 5$

x	3	0	-2
y	-2	5	7

gradient = -1

10. $y = -x - 4$

x	-2	0	-4
y	-2	-4	0

gradient = -1

11. $y = -2x$

x	5	0	-4
y	-10	0	8

gradient = -2

12. $y = -3x - 1$

x	3	0	-4
y	-10	-1	-13

gradient = -3

13. $y = -4x - 1$

x	2	0	-2
y	-9	-1	7

gradient = -4

14. $y = -3x + 7$

x	5	0	-1
y	-8	7	10

gradient = -3

15. $y = -3x + 8$

x	4	0	-1
y	-4	8	11

gradient = -3

16. $y = -2x - 5$

x	1	0	-4
y	-7	-5	3

gradient = -2

17. $y = \frac{1}{2}x + 3$

x	4	0	-6
y	5	3	0

gradient = $\frac{1}{2}$

18. $y = \frac{1}{4}x - 5$

x	8	0	-4
y	-3	-5	-6

gradient = $\frac{1}{4}$

19. $y = -\frac{1}{3}x + 6$

x	9	0	-6
y	3	6	8

gradient = $-\frac{1}{3}$

20. $y = -\frac{3}{4}x + 1$

x	4	0	-8
y	-2	1	7

gradient = $-\frac{3}{4}$