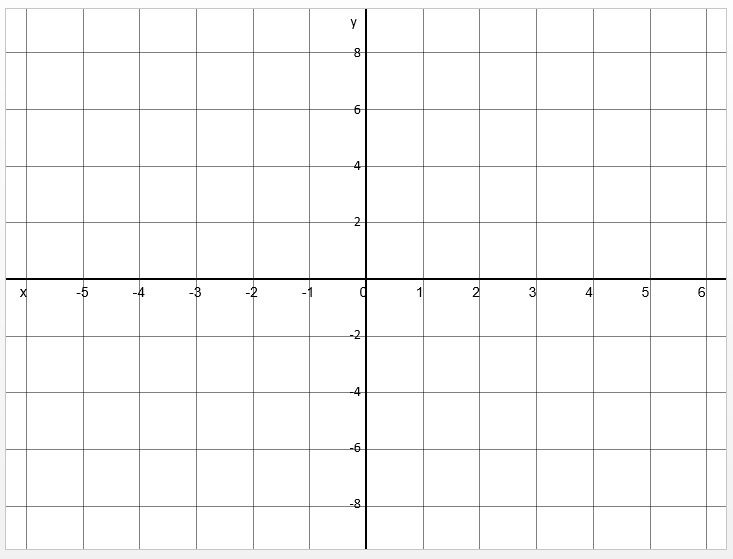
**Year 8 Straight Line Equations**

**Exercise 1 – Lines and their Equations**

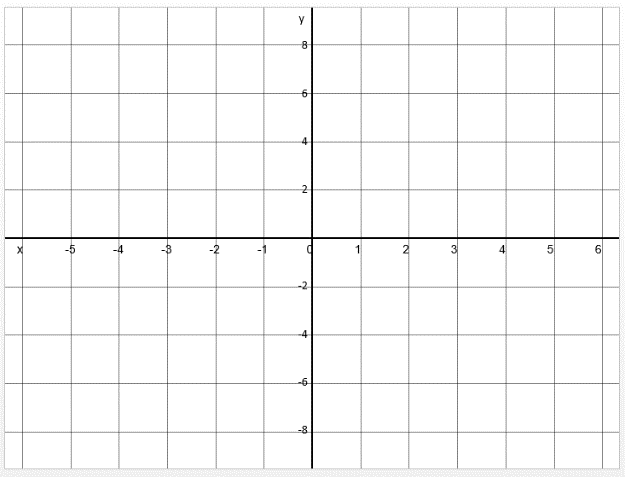
**Example:** On the grid, draw the line with equation



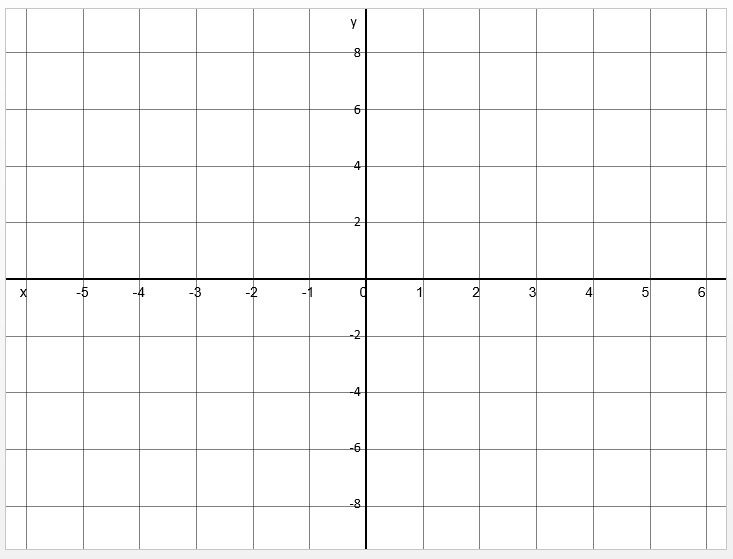
**Example 2:** Complete the table of values for .

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

**Question 1:** Draw the line with equation



**Question 2:** Draw the line with equation



**Question 3:** On the grid, draw the graph of *y* = 4*x* − 2



**Question 4.** (a) Complete the table of values for 3*x* + 2*y* = 6

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| *x* | –2 | –1 | 0 | 1 | 2 | 3 |
| *y* |  | 4.5 | 3 |  |  | –1.5 |

**(2)**

(b) On the grid, draw the graph of 3*x* + 2*y* = 6

**

**(2)**

**Question 5:** Put a tick or cross to determine whether each of the following points are on the line with the given equation.

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Question 6:** For the given equation of a line and point, indicate whether the point is above the line, on the line or below the line. (Hint: Find out first what is on the line for the given )

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | Below the line | On the line | Above the line |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Question 1: The equation of a line is . If the value of some point on the line is , what is the full coordinate of the point, in terms of ?

Question 2: What is the area of the region enclosed between the line with equation , the axis, and the axis?