|  |  |
| --- | --- |
| **Crack the Code** | **Straight Line Graphs** |

Answer all the questions, then add your answers together to find the three-digit code

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Write down the gradient of the line with equation$$y=5x-1$$ | Complete the table for $y=2x+3$

|  |  |  |  |
| --- | --- | --- | --- |
| $$x$$ | 1 | 2 | 3 |
| $$y$$ |  |  |  |

 | Write down the coordinates of this point. | Write down the y-intercept of the line with equation$$y=x+10$$ | Write down the gradient of the line with equation$$y=-x+7$$ | Find the gradient |
| Write down the coordinates of this point. | Find the y-intercept | Write down the gradient of the line with equation$$y=8+2x$$ | Complete the table for $y=3x-2$

|  |  |  |  |
| --- | --- | --- | --- |
| $$x$$ | 3 | 4 | 5 |
| $$y$$ |  |  |  |

 | The equation of this line is $y=?$ | Write down the y-intercept of the line with equation$$y=8+5x$$ |
| Find the missing coordinate in the rhombus with vertices (1, 5), (7, 3) and (13, 5) | Write down the y-intercept of the line with equation$$y=\frac{1}{2}x-1$$ | Find the gradient | Find the y-intercept | Complete the table for $y=-x+6$

|  |  |  |  |
| --- | --- | --- | --- |
| $$x$$ | 1 | 2 | 3 |
| $$y$$ |  |  |  |

 | Write down the coordinates of this point. |
| Write down the y-intercept of the line with equation$$y=2x-5$$ | Complete the table for $y=5x+2$

|  |  |  |  |
| --- | --- | --- | --- |
| $$x$$ | 1 | 2 | 3 |
| $$y$$ |  |  |  |

 | Find the y-intercept | Write down the gradient of the line with equation$$y=7x$$ | Find the gradient | Three corners of a square are (1, 3), (4, 3) and (1, 6). What are the coordinates of the fourth corner? |
| Write down the gradient of the line with equation$$y=-3x-2$$ | Write down the coordinates of this point. | Write down the y-intercept of the line with equation$$y=3x+15$$ | Find the gradient | Complete the table for $y=-2x+10$

|  |  |  |  |
| --- | --- | --- | --- |
| $$x$$ | 2 | 3 | 4 |
| $$y$$ |  |  |  |

 | Find the y-intercept |
| Find the gradient | Two corners of a rectangle are (5, 6) and (7, 12). What are the coordinates of the other two corners? | Complete the table for $x+y=10$

|  |  |  |  |
| --- | --- | --- | --- |
| $$x$$ | 4 | 5 | 6 |
| $$y$$ |  |  |  |

 | Write down the y-intercept of the line with equation$$y=-x+6$$ | Write down the gradient of the line with equation$$2y=6x+10$$ | The equation of this line is $x=?$ |