**Splitting the steps: Rearranging equations**

For each equation rearrange to make y the subject of the equation:

***Set A***

|  |  |  |
| --- | --- | --- |
| 1. | 3y – 6 = 12x  3y = 12x + 6  y = 4x + \_\_\_ | Add 6 to both sides  Divide by 3 |
| 2. | 5y – 15 = 30x  5y = 30x + 15  y = \_\_\_\_ + \_\_\_\_\_ | Add 15 to both sides  Divide by 5 |
| 3. | 4y – 16 = 20x  4y = 20x + \_\_\_\_\_\_  y = \_\_\_\_\_ + \_\_\_\_\_\_ | Add 16 to both sides  Divide by \_\_\_\_\_\_\_ |
| 4. | 10y – 70 = 90x  10y = \_\_\_\_\_ + \_\_\_\_\_\_  y = \_\_\_\_\_ + \_\_\_\_\_\_ | Add \_\_\_\_\_\_ to both sides  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 5. | 2y – 8 = 20x  \_\_\_\_\_ = \_\_\_\_\_\_ + \_\_\_\_\_\_  \_\_\_\_\_ = \_\_\_\_\_\_ + \_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 6. | 12y – 36 = 48x | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

***Set B***

|  |  |  |
| --- | --- | --- |
| 1. | 4y + 8 = 12x  4y = 12x - 8  y = 3x + \_\_\_ | Subtract 8 from both sides  Divide by 4 |
| 2. | 11y + 11 = 33x  11y = 33x - 11  y = \_\_\_\_ + \_\_\_\_\_ | Subtract 11 from both sides  Divide by 11 |
| 3. | 13y + 39 = 26x  13y = 26x + \_\_\_\_\_\_  y = \_\_\_\_\_ + \_\_\_\_\_\_ | Subtract 39 to both sides  Divide by \_\_\_\_\_\_\_ |
| 4. | 5y + 35 = 10x  5y = \_\_\_\_\_ + \_\_\_\_\_\_  y = \_\_\_\_\_ + \_\_\_\_\_\_ | Subtract \_\_\_\_\_\_ from both sides  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 5. | 9y + 18 = 27x  \_\_\_\_\_ = \_\_\_\_\_\_ + \_\_\_\_\_\_  \_\_\_\_\_ = \_\_\_\_\_\_ + \_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 6. | 8y + 54 = 64x | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**Extension:**

***(a)*** 6y – 36 = 24x ***(b)*** -2y + 14 = -8x (c) 45 – 9y = 18x (d) 4x = 8y – 12

www.mathssandpit.co.uk/blog