

Plotting Linear Graphs – Create-a-Picture

For each of the following equations, complete the table of values and plot the graph of the equation between the x -values given.

1. $y = x + 5$ $\{2 \leq x \leq 4\}$

x	2	2.5	3	3.5	4
y	7	7.5	8	8.5	9

2. $y = x - 4$ $\{4 \leq x \leq 6\}$

x	4	4.5	5	5.5	6
y	0	0.5	1	1.5	2

3. $y = 11 - x$ $\{4 \leq x \leq 7\}$

x	4	5	6	7
y	7	6	5	4

4. $y = -x + 12$ $\{10 \leq x \leq 12\}$

x	10	10.5	11	11.5	12
y	2	1.5	1	0.5	0

5. $y = 2x - 17$ $\{11 \leq x \leq 12\}$

x	11	11.25	11.5	11.75	12
y	5	5.5	6	6.5	7

6. $y = \frac{1}{4}x + \frac{9}{4}$ $\{7 \leq x \leq 11\}$

x	7	8	9	10	11
y	4	4.25	4.5	4.75	5

7. $y = -0.25x + 5$ $\{0 \leq x \leq 4\}$

x	0	1	2	3	4
y	5	4.75	4.5	4.25	4

Now add the following straight lines:

8. $x = 12$ $\{0 \leq y \leq 7\}$

9. $y = 2$ $\{6 \leq x \leq 10\}$

10. $x = 4$ $\{7 \leq y \leq 9\}$

11. $y = 7$ $\{0 \leq x \leq 2\}$

12. $x = 4$ $\{0 \leq y \leq 4\}$

13. $x = 0$ $\{5 \leq y \leq 7\}$

Finally, colour in your picture!

