

DRAWING A STRAIGHT LINE GRAPH FROM A TABLE OF VALUES

Answer all of these questions. Remember to show your working out in all questions.

SPIRAL



S1.

What is one half of 10?

S2.

What is 10% of 50?

S3.

What is one quarter of 8?

S4.

What is 25% of 20?

DEVELOP

CORBETT VIDEO: <https://youtu.be/AQ0tkNv9GY>

1.

For $y = x + 1$, find y when $x=0$, $x=1$, $x=2$

Step 1: When $x=0$, $y = 0 + 1 = 1$

Step 2: When $x=1$, $y = 1 + 1 = 2$

Step 3: When $x=2$, $y = 2 + 1 = 3$

2.

For $y = 2x$, find y when $x=0$, $x=1$, $x=2$

Step 1: When $x=0$, $y = 2 \times 0 = 0$

Step 2: When $x=1$, $y = 2 \times 1 = 2$

Step 3: When $x=2$, $y = 2 \times 2 = 4$

3.

For $y = 3x + 1$, find y when $x=0$, $x=1$, $x=2$

Step 1: When $x=0$, $y = 3 \times 0 + 1 = 1$

Step 2: When $x=1$, $y = 3 \times 1 + 1 = 4$

Step 3: When $x=2$, $y = 3 \times 2 + 1 = 7$

4.

For $y = 4x$, find y when $x=0$, $x=1$, $x=2$

Step 1: When $x=0$, $y = 4 \times 0 = 0$

Step 2: When $x=1$, $y = 4 \times 1 = 4$

Step 3: When $x=2$, $y = 4 \times 2 = 8$

5.

For $y = 2x + 3$, find y when $x=0$, $x=1$, $x=2$

Step 1: When $x=0$, $y = 2 \times 0 + 3 = 3$

Step 2: When $x=1$, $y = 2 \times 1 + 3 = 5$

Step 3: When $x=2$, $y = 2 \times 2 + 3 = 7$

6. For $y = x + 2$, find y when
 $x=0$, $x=1$, $x=2$

7. For $y = 5x$, find y when $x=0$,
 $x=1$, $x=2$

8. For $y = 3x + 2$, find y when
 $x=0$, $x=1$, $x=2$

9. For $y = 4x + 1$, find y when
 $x=0$, $x=1$, $x=2$

10. For $y = 2x - 1$, find y when
 $x=1$, $x=2$, $x=3$

11. For $y = 6x$, find y when $x=0$,
 $x=1$, $x=2$

12. For $y = x + 5$, find y when
 $x=0$, $x=1$, $x=2$

13. For $y = 3x$, find y when $x=0$,
 $x=1$, $x=2$

14. For $y = 2x + 4$, find y when
 $x=0$, $x=1$, $x=2$

15. For $y = 5x + 2$, find y when
 $x=0$, $x=1$, $x=2$

16. For $y = 4x$, find y when $x=0$,
 $x=1$, $x=3$

17. For $y = 3x + 3$, find y when
 $x=0$, $x=2$, $x=4$

18. For $y = x + 10$, find y when
 $x=0$, $x=1$, $x=2$

19. For $y = 2x + 1$, find y when
 $x=0$, $x=3$, $x=5$

20. For $y = 10x$, find y when
 $x=0$, $x=1$, $x=2$

APPLY



A1.

A taxi charges £3 fixed fee plus £2 per mile. The cost (y pounds) for x miles is $y = 2x + 3$. What is the cost for 0 miles, 1 mile, 2 miles?

A2.

A bus travels 30 miles per hour. The distance (y miles) after x hours is $y = 30x$. How far has it travelled after 0 hours, 1 hour, 2 hours?

A3.

A plant grows 3 cm per week. The height (y cm) after x weeks starting from 4 cm is $y = 3x + 4$. What is the height after 0 weeks, 1 week, 2 weeks?

A4.

A pool fills at 50 litres per minute. The water amount (y litres) after x minutes is $y = 50x$. How much water is there after 0 minutes, 2 minutes, 4 minutes?

A5.

A phone call costs 15 pence per minute plus a 20 pence connection fee. The total cost (y pence) for x minutes is $y = 15x + 20$. What is the cost for 0 minutes, 1 minute, 3 minutes?