

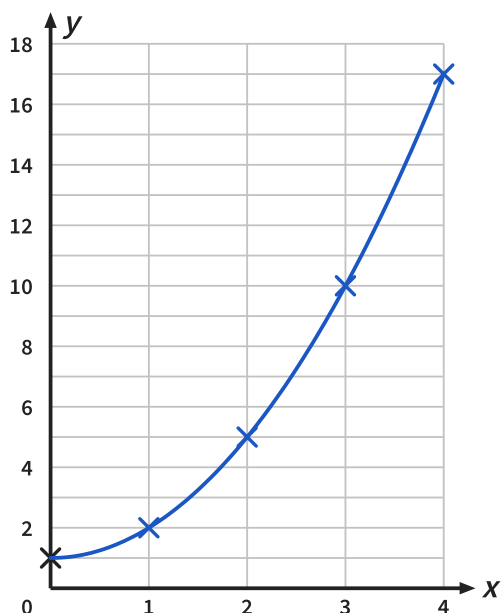
Plotting Quadratic Graphs

ANSWERS

1

Draw the graph of $y = x^2 + 1$.

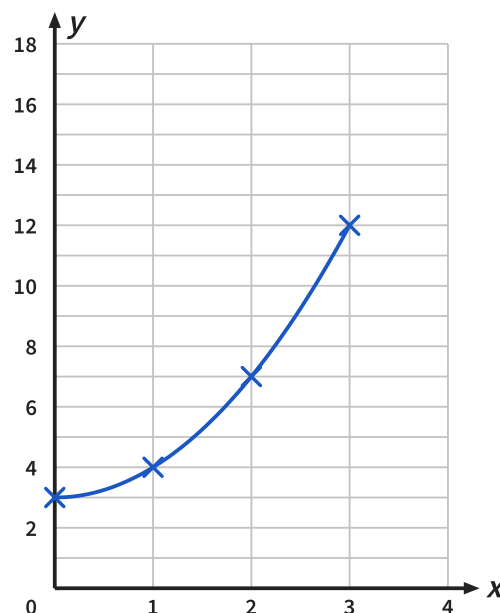
x	0	1	2	3	4
y	1	2	5	10	17



2

Draw the graph of $y = x^2 + 3$.

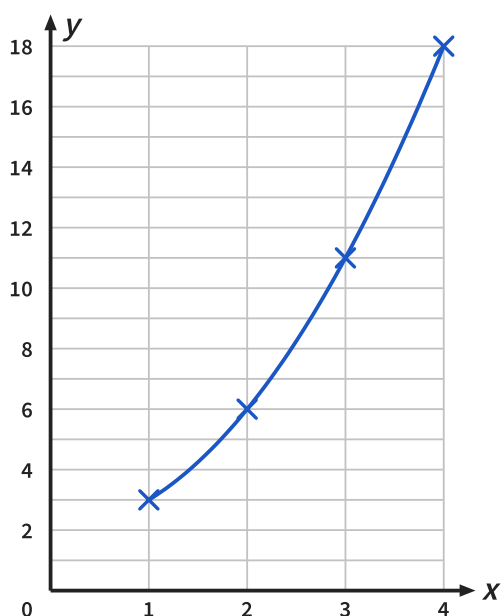
x	0	1	2	3
y	3	4	7	12



3

Draw the graph of $y = x^2 + 2$.

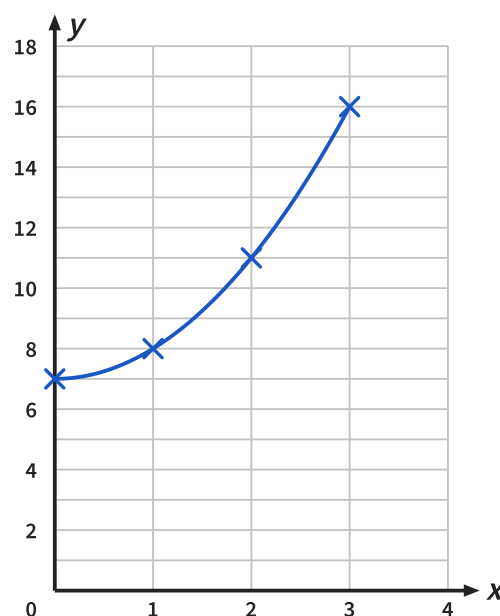
x	1	2	3	4
x^2	1	4	9	16
y	3	6	11	18



4

Draw the graph of $y = x^2 + 7$.

x	0	1	2	3
x^2	0	1	4	9
y	7	8	11	16



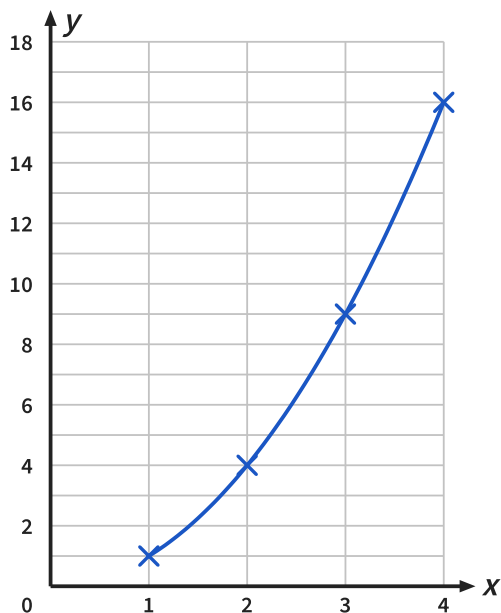
Plotting Quadratic Graphs

ANSWERS

5

Draw the graph of $y = x^2$.

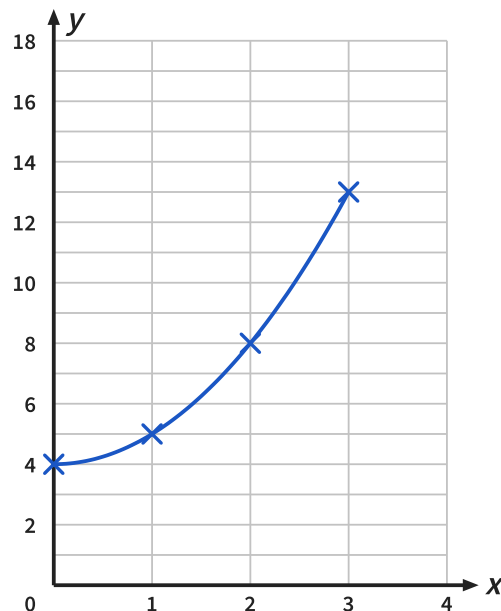
x	1	2	3	4
y	1	4	9	16



6

Draw the graph of $y = x^2 + 4$.

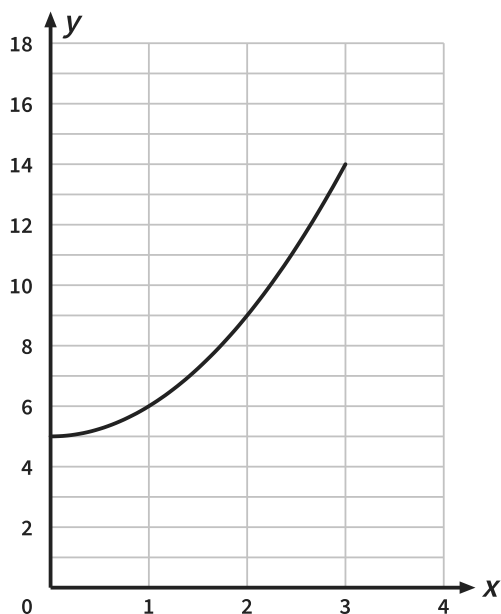
x	0	1	2	3
x^2	0	1	4	9
y	4	5	8	13



7

Complete the table for this curve.

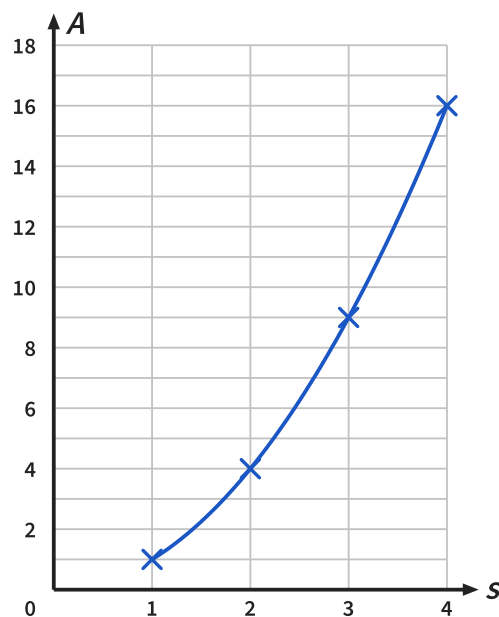
x	0	1	2	3
y	5	6	9	14



8

A square has sides of s cm. Its area is A cm². $A = s^2$. Draw the graph.

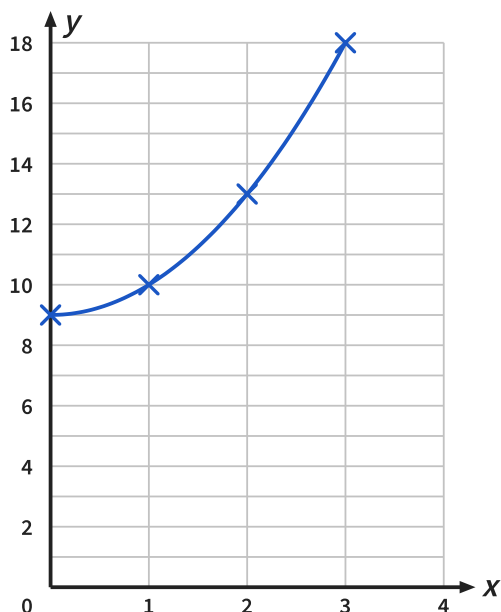
s	1	2	3	4
A	1	4	9	16



9

Draw the graph of $y = x^2 + 9$.

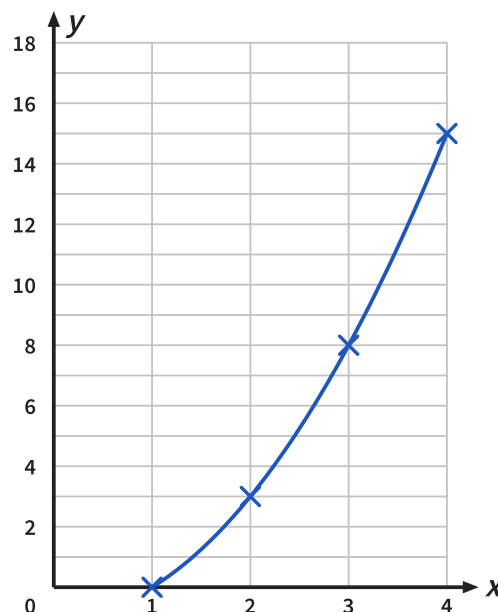
x	0	1	2	3
x^2	0	1	4	9
y	9	10	13	18



10

Draw the graph of $y = x^2 - 1$.

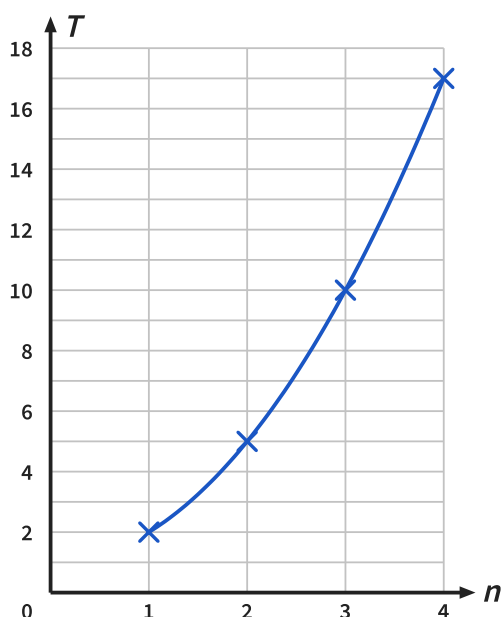
x	1	2	3	4
x^2	1	4	9	16
y	0	3	8	15



11

Pattern n has T tiles. $T = n^2 + 1$. Draw the graph.

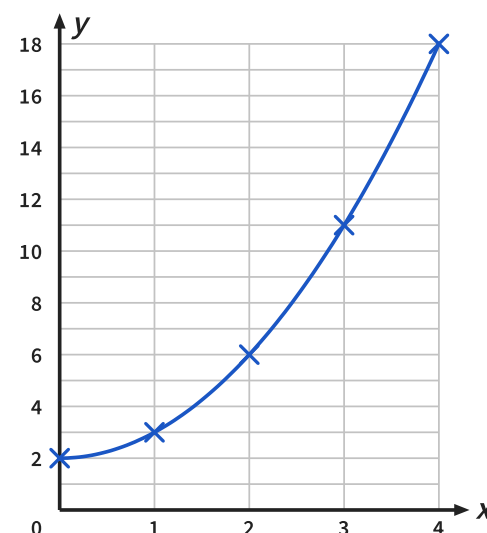
n	1	2	3	4
n^2	1	4	9	16
T	2	5	10	17



12

Draw the graph of $y = x^2 + 2$. Write down the lowest point.

x	0	1	2	3	4
x^2	0	1	4	9	16
y	2	3	6	11	18

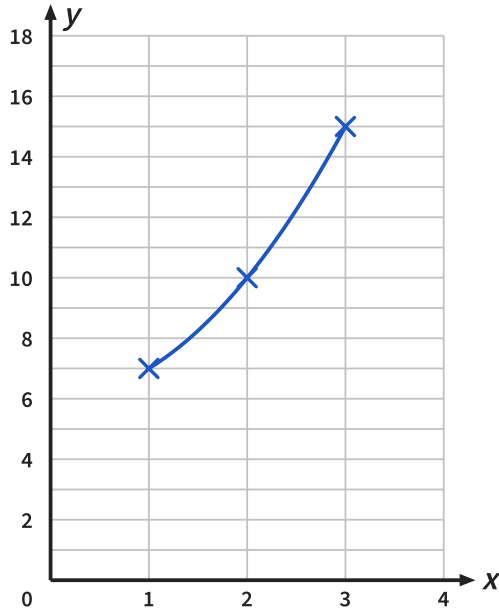


Lowest point (0 , 2)

13

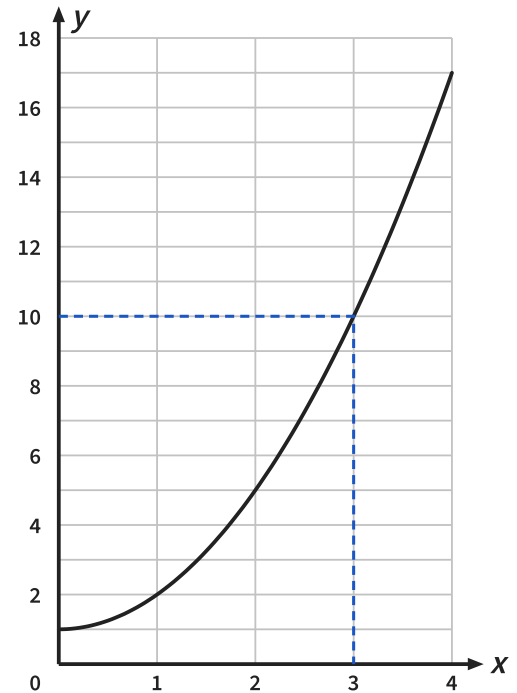
Draw the graph of $y = x^2 + 6$.

x	1	2	3
x^2	1	4	9
y	7	10	15



14

Here is the graph of $y = x^2 + 1$. Find x when $y = 10$.

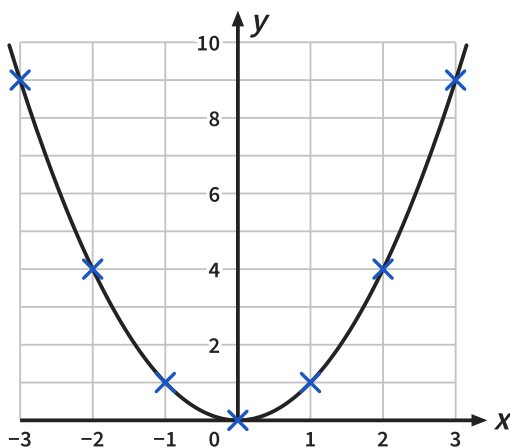


$x =$ 3

15

Here is the graph of $y = x^2$. Use it to complete the table.

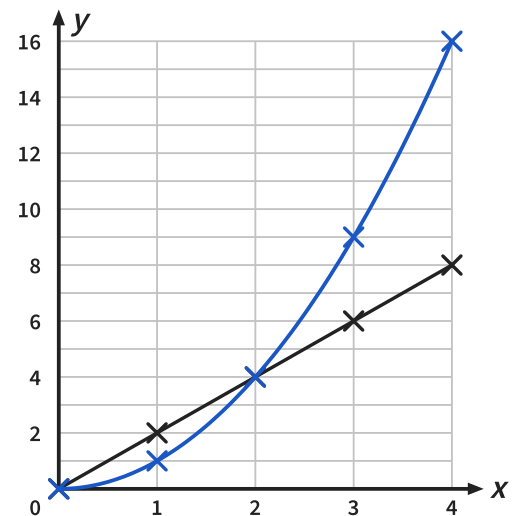
x	-3	-2	-1	0	1	2	3
y	9	4	1	0	1	4	9



16

Ali draws the graph of $y = x^2$. Ali gets a straight line. What has Ali done wrong?

x	0	1	2	3	4
y	0	2	4	6	8



Ali has worked out $2 \times x$, not $x \times x$

The y row should be 0, 1, 4, 9, 16