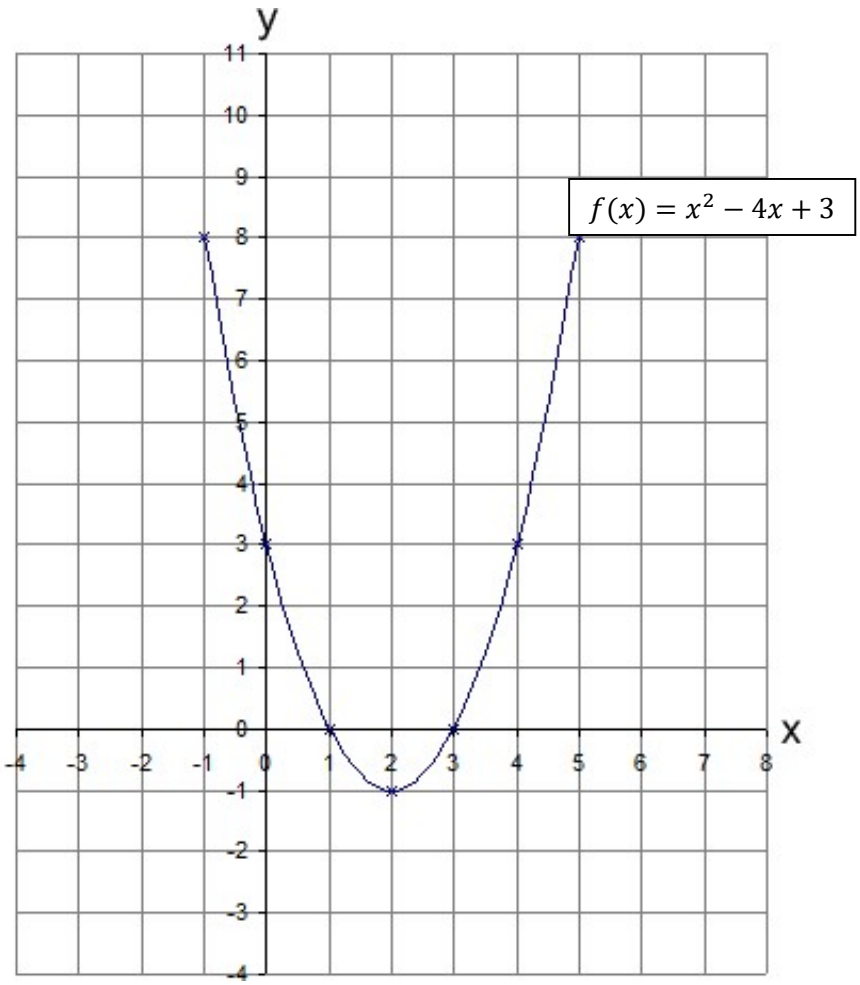
Transformations of Graphs Starter Investigation



This is the graph of $f(x) = x^2 - 4x + 3$

For each of the following

i) write out the new function.

ii) fill in the table of values.

iii) draw and label the graph on the grid.

a) $f(x) + 2 =$

x	-1	0	1	2	3	4	5
$f(x)$							

- What do you notice?

_____

- What transformation is this?

_____

b) $f(x + 2) =$

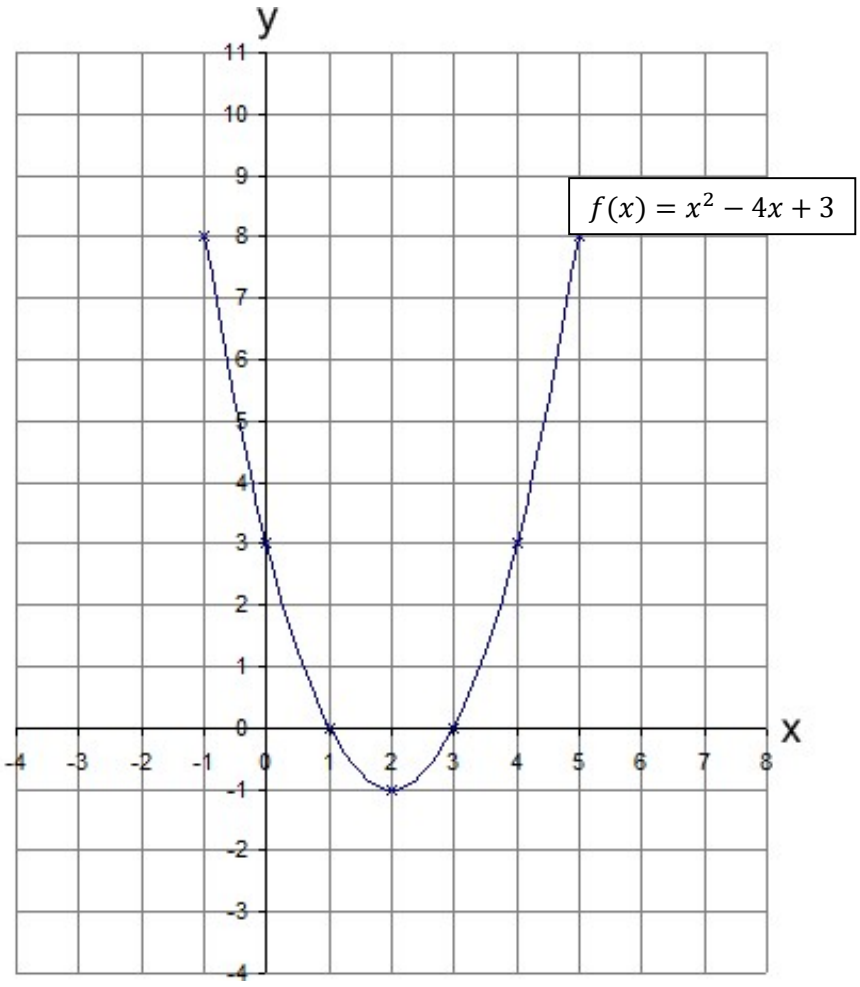
x	-3	-2	-1	0	1	2	3
$f(x)$							

- What do you notice?

_____

- What transformation is this?

_____



This is the graph of $f(x) = x^2 - 4x + 3$

For each of the following

i) write out the new function.

ii) fill in the table of values.

iii) draw and label the graph on the grid.

c) $2f(x) =$

x	-1	0	1	2	3	4	5
$f(x)$							

- What do you notice?

_____

- What transformation is this?

_____

d) $f(2x) =$

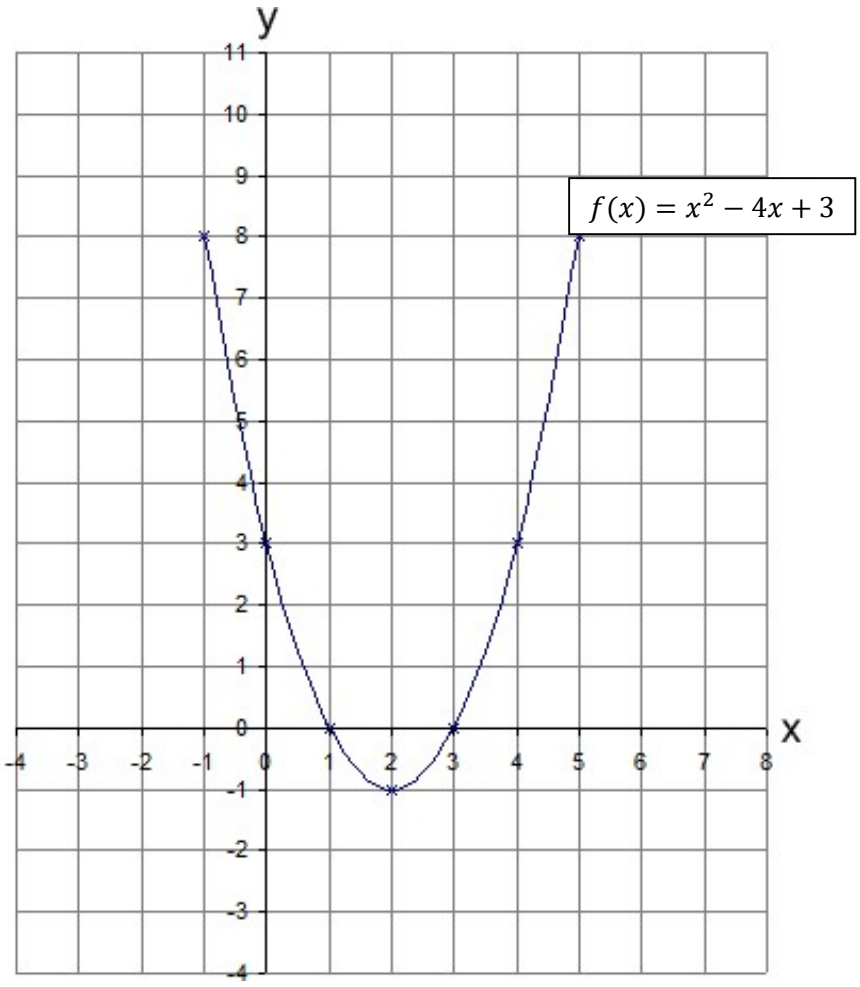
x	-1	0	1	2	3
$f(x)$					

- What do you notice?

_____

- What transformation is this?

_____



This is the graph of $f(x) = x^2 - 4x + 3$

For each of the following
- i) write out the new function.
- ii) fill in the table of values.
- iii) draw and label the graph on the grid.

e) $-f(x) =$

x	-1	0	1	2	3	4	5
$f(x)$							

- What do you notice?

_____

- What transformation is this?

_____

f) $f(-x) =$

x	-5	-4	-3	-2	-1	0	1
$f(x)$							

- What do you notice?

_____

- What transformation is this?

_____