

# Graphing Quadratics

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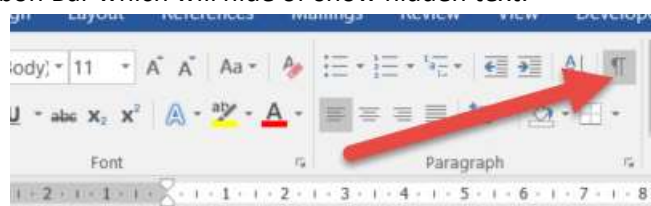
A full Acceptable Use FAQ is available on our website ([Acceptable Use FAQ](#)).

## How Do I Use The Videos?

1. Copy the link into your web browser.
2. Left clicks have a quiet click sound.
3. Right clicks have a loud click sound.

## Where Are The Solutions?

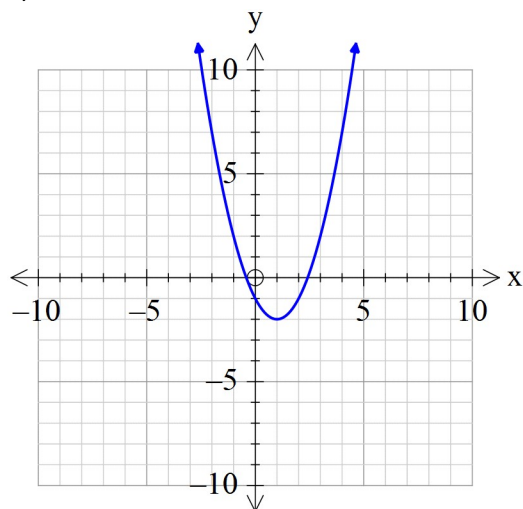
Solutions are only available in the Word docx format of the resources. Press this button on the Home Tab of the Ribbon Bar which will hide or show hidden text.



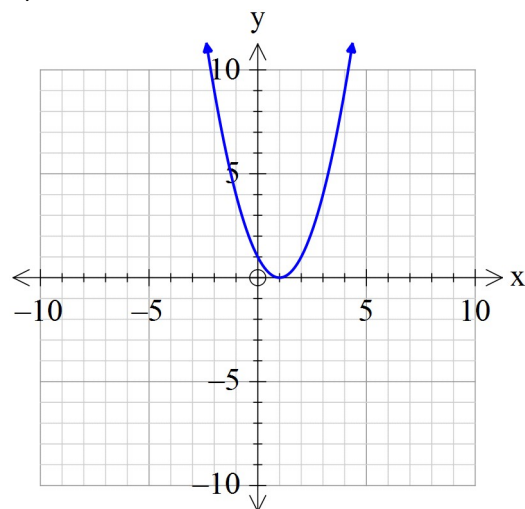
## Question

Which of these graphs represents  $y = x^2 - 2x + 1$  ?

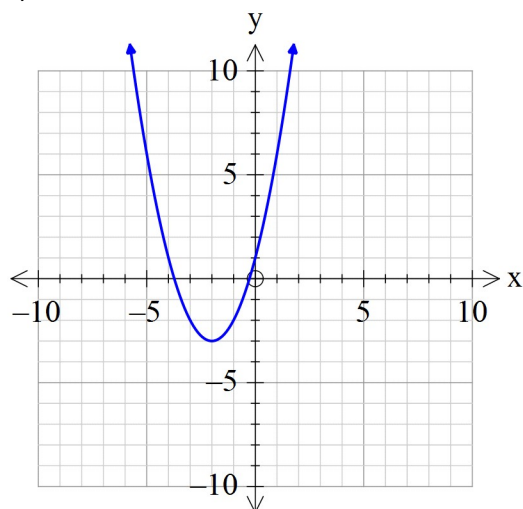
a)



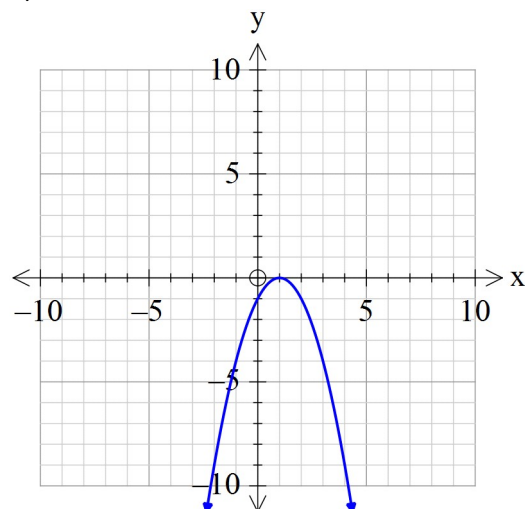
b)



c)



d)



[1 Mark]

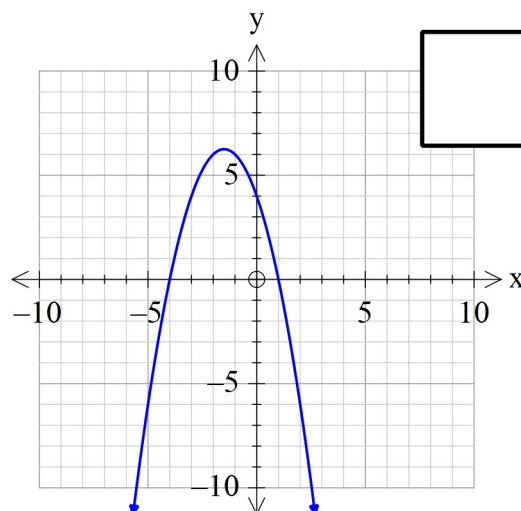
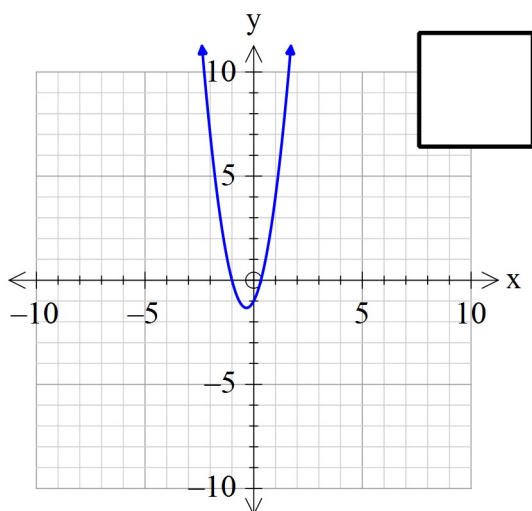
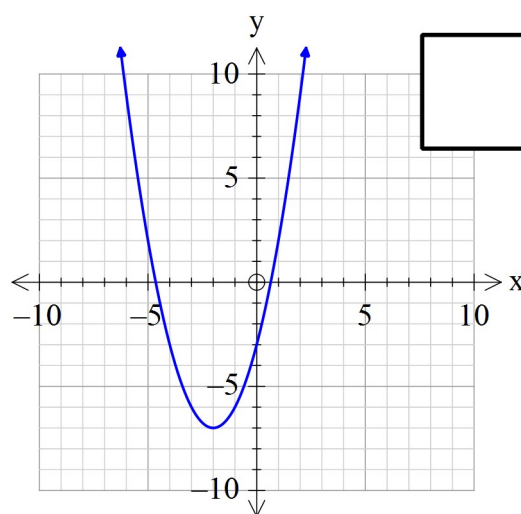
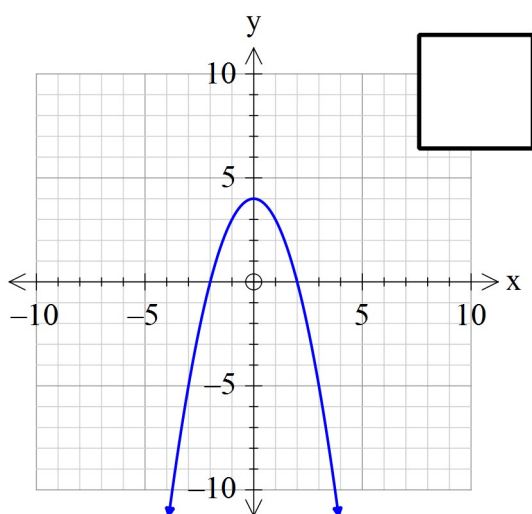
[How We Drew The Diagrams](#)

<http://www.youtube.com/v/7e89su2z5po&hd=1&autoplay=1>

## Question

Match each graph to a function. Write the appropriate letter in the square at the top right of each graph.

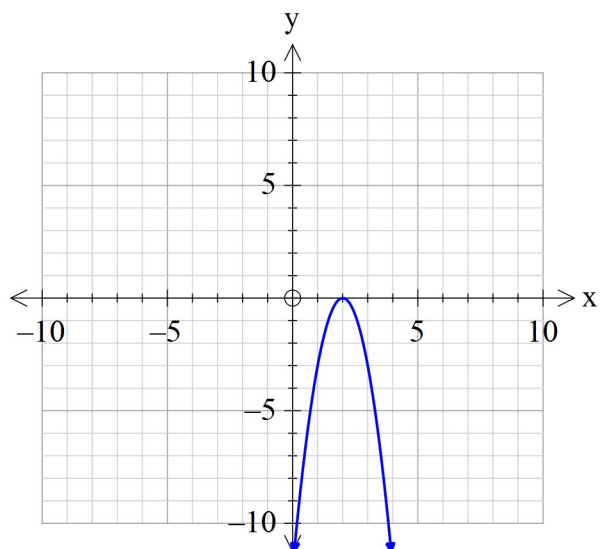
- A)  $y = x^2 - 4x - 3$
- B)  $y = -x^2 - 3x + 4$
- C)  $y = 4 - x^2$
- D)  $y = 2x^2 + 4$
- E)  $y = 3x^2 + 2x - 1$
- F)  $y = x^2 + 4x - 3$



[4 Marks]

## Question

This is the graph of the quadratic function  $y = a(x - p)^2$ . Using the graph, which of these four statements is correct.



- a)  $a = 3$  and  $p = -2$
- b)  $a = -1$  and  $p = 2$
- c)  $a = 1$  and  $p = 2$
- d)  $a = -3$  and  $p = 2$

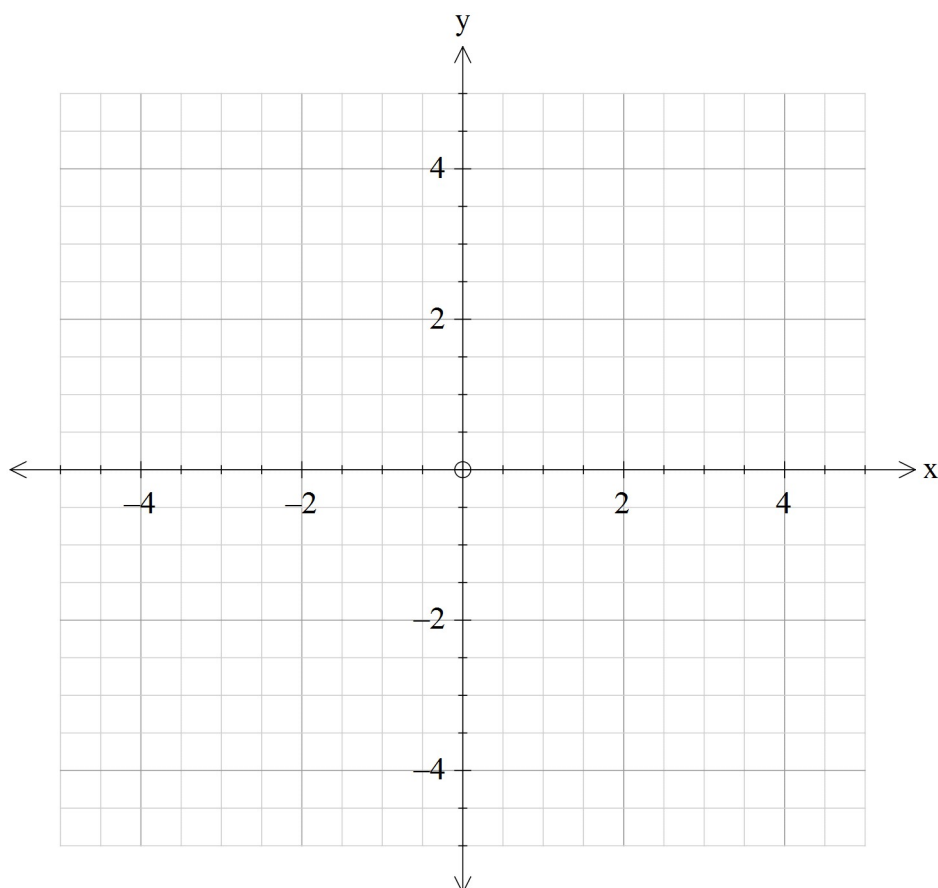
[1 Mark]

## Question

a) Complete this table for the function  $y = x^2 - x - 3$

x	-4	-3	-2	-1	0	1	2	3	4
y	17					-3		3	

b) Graph the function on this set of axes.



c) Determine the turning point of the graph.

d) Use your graph to estimate the solutions to  $x^2 - x - 3 = 0$

[3,3,2,2 = 10 Marks]