

Module 4.C : Graphing

SECTION 1 : Draw a graph representing a second degree equation.

The graph of the second degree equation $y = ax^2 + bx + c$, is a parabola that

- opens up if $a > 0$ and
- opens down if $a < 0$.

The graph of the second degree equation $x = ay^2 + by + c$, is a parabola that

- opens to the right if $a > 0$ and
- opens to the left if $a < 0$.

EXERCISE 8

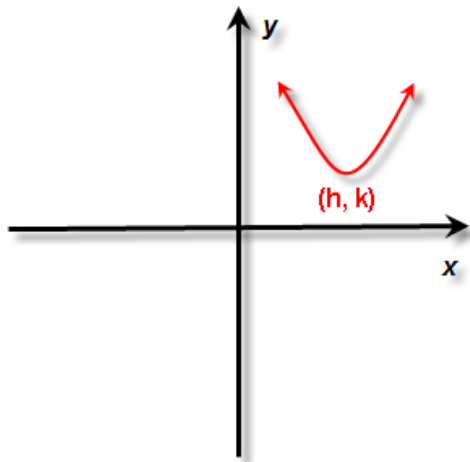
For each equation below, sketch a possible graph of the equation.

a) $y = ax^2 + bx + c$, where a , b and c are positive.

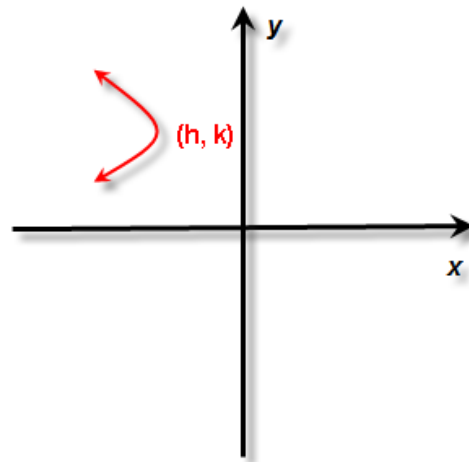
b) $x = ay^2 + by + c$, where a and b are negative and c is positive.

SOLUTION

a)

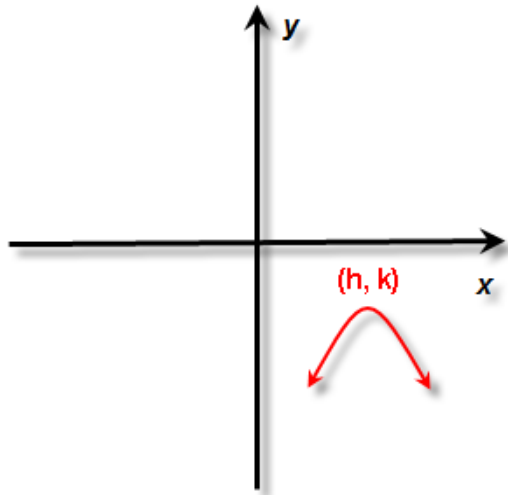


b)



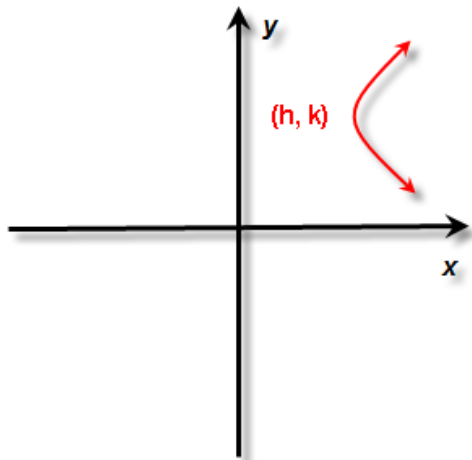
MODULE 4.C - ASSESSMENT

_____9. For the graph below, find the possible equation.



- A** $x = ay^2 + by + c$ $a > 0$ **B** $x = ay^2 + by + c$ $a < 0$
C $y = ax^2 + bx + c$ $a > 0$ **D** $y = ax^2 + bx + c$ $a < 0$
E I do not know

_____10. For the graph below, find the possible equation.



- A** $x = ay^2 + by + c$ $a > 0$ **B** $x = ay^2 + by + c$ $a < 0$
C $y = ax^2 + bx + c$ $a > 0$ **D** $y = ax^2 + bx + c$ $a < 0$
E I do not know