Answer on Question #57226 – Math – Calculus

The vertices for the hyperbola

(x-1)^2 (y+3)^2
--------- - --------- = 1 are (1,0) and (1,-6)
25 9

A: True

B: False

Solution

Vertices of hyperbola must satisfy the equation but the points (1, 0) and (1 , -6) does not satisfy the equation $\frac{(x-1)^2}{25} - \frac{(y+3)^2}{9} = 1$:

$$\frac{(1-1)^2}{25} - \frac{(-6+3)^2}{9} = -1 \neq 1,$$

$$\frac{(1-1)^2}{25} - \frac{(0+3)^2}{9} = -1 \neq 1.$$

Answer: B. False.