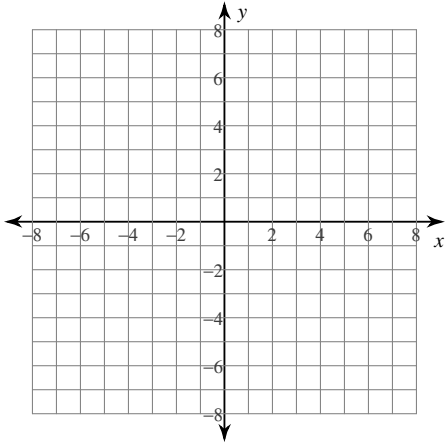


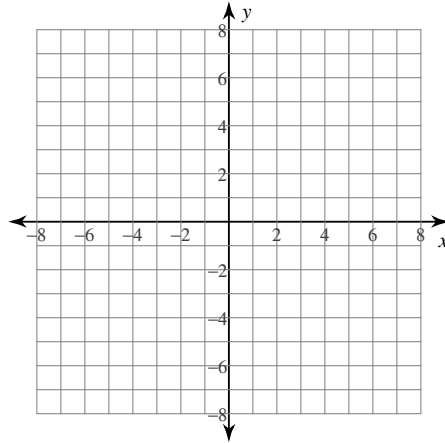
## Graphing Hyperbolas Given the General Equation

Identify the vertices of each. Then sketch the graph.

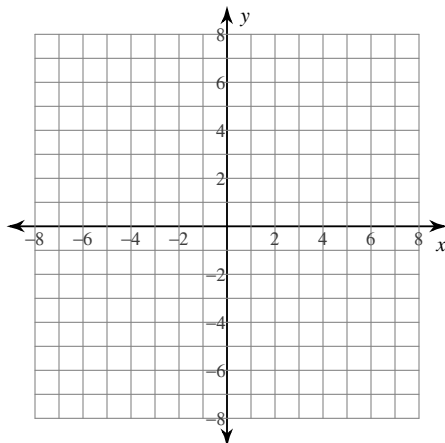
1)  $x^2 - 16y^2 - 2x + 32y - 31 = 0$



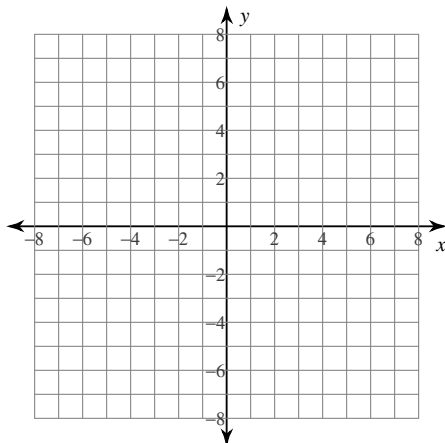
2)  $x^2 - 25y^2 + 100y - 125 = 0$



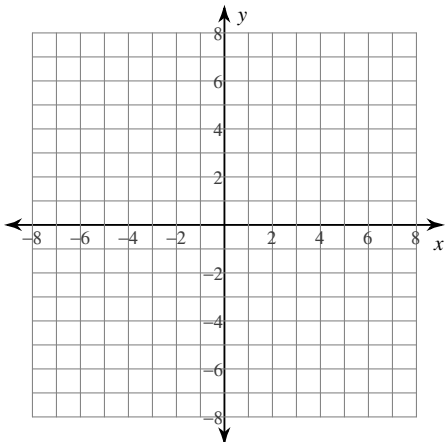
3)  $x^2 - y^2 - 25 = 0$



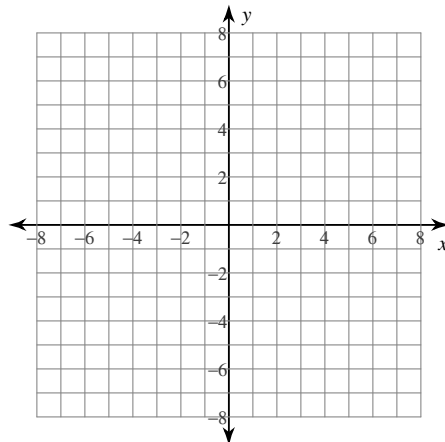
4)  $x^2 - 16y^2 - 2x - 64y - 79 = 0$



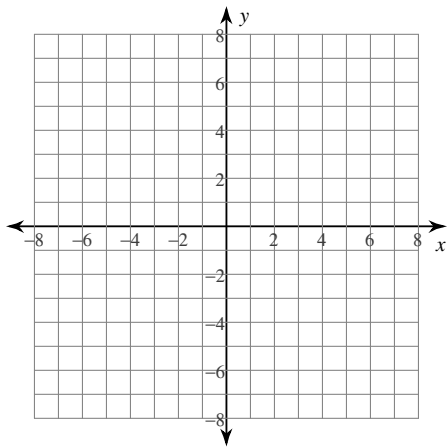
5)  $-25x^2 + 16y^2 + 50x - 425 = 0$



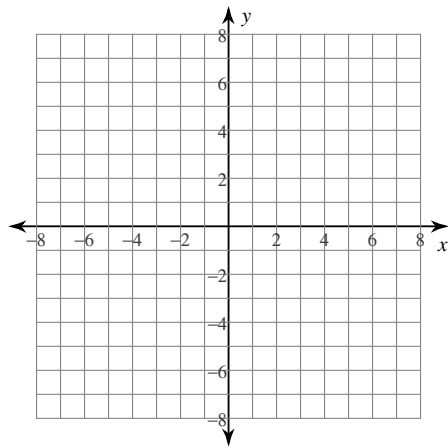
6)  $-16x^2 + 25y^2 - 400 = 0$



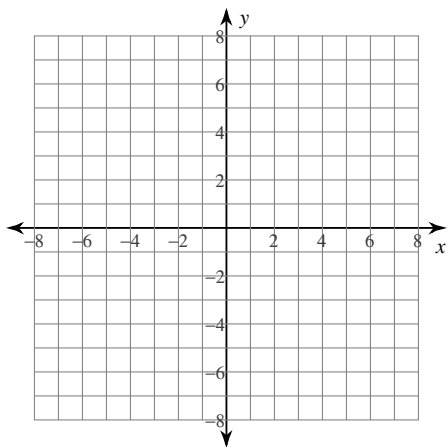
$$7) -25x^2 + y^2 + 200x - 425 = 0$$



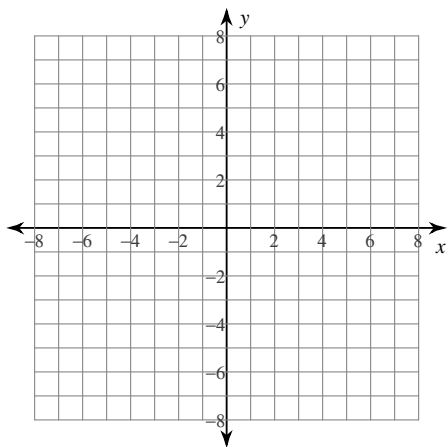
$$8) -16x^2 + y^2 + 2y - 15 = 0$$



$$9) -25x^2 + y^2 - 150x - 250 = 0$$

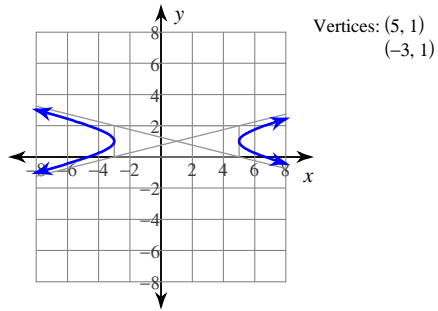


$$10) -9x^2 + 4y^2 - 18x - 45 = 0$$

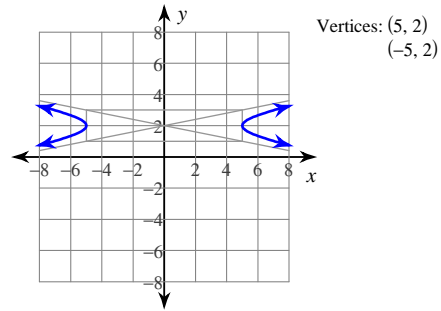


# Answers to Graphing Hyperbolas Given the General Equation

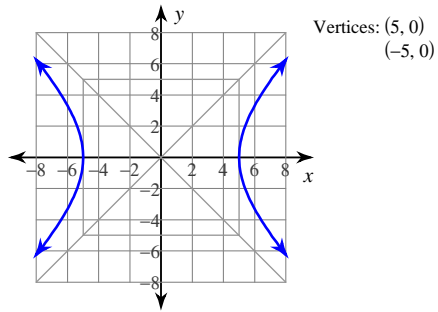
1)



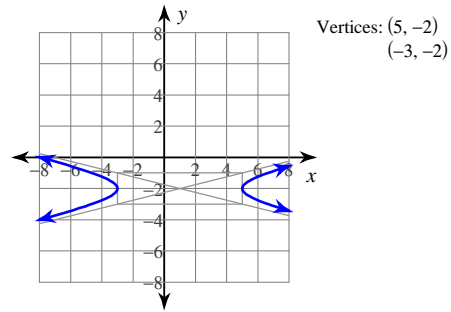
2)



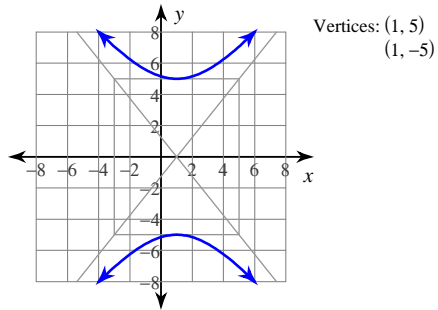
3)



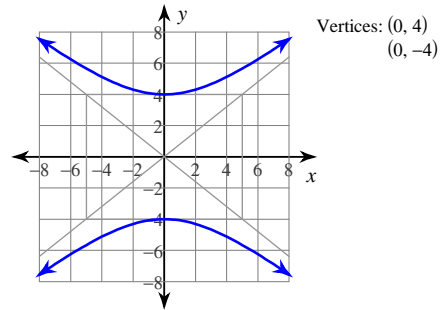
4)



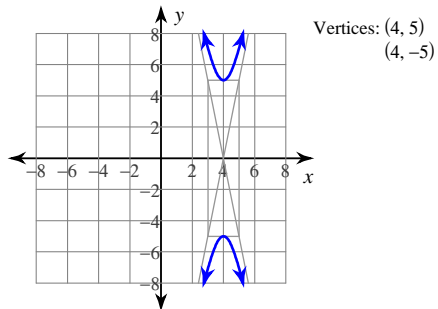
5)



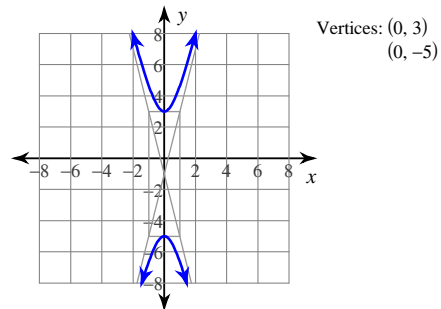
6)



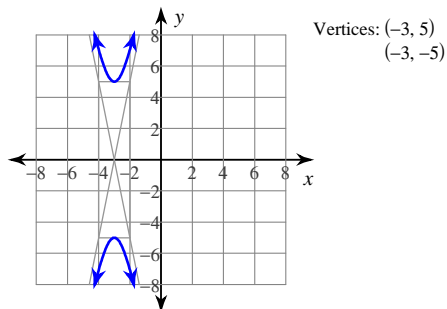
7)



8)



9)



10)

