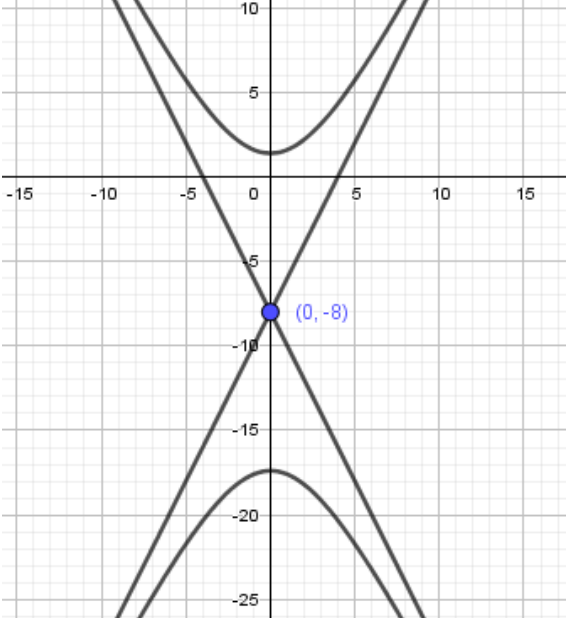
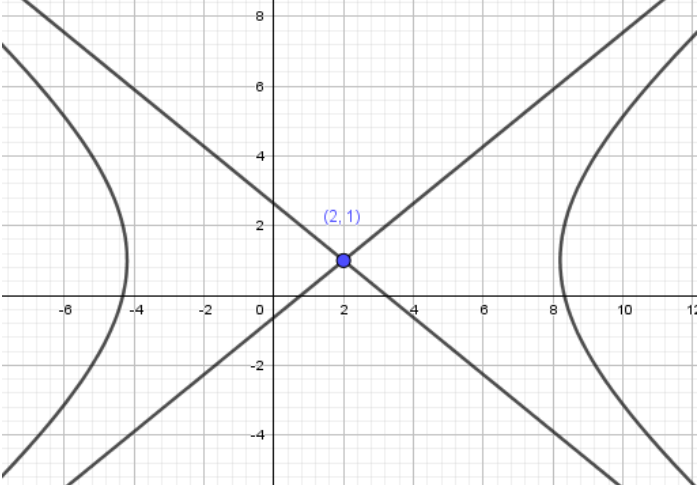


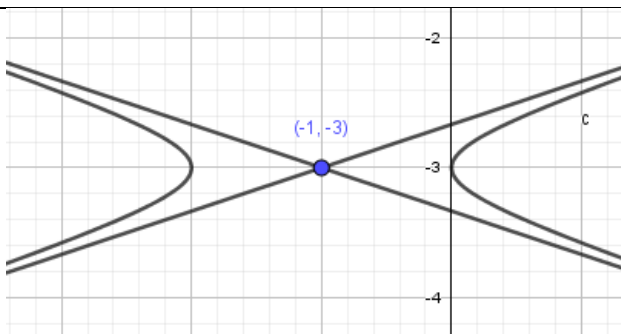
VD: Unit 9 Topic 3 Part 1

Given a general form of a hyperbola,

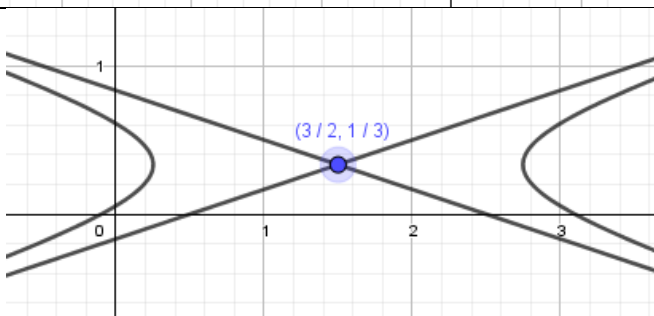
- (a) write a standard form
- (b) find the transverse axis, asymptotes
- (c) find the coordinates of foci, vertices and
- (d) graph

general form	characteristics of the hyperbola (only graph is provided, please find other characteristics through graph)
1. $4x^2 - 16y - y^2 = -24$	
2. $2x^2 - 3y^2 - 8x + 6y - 72 = 0$	

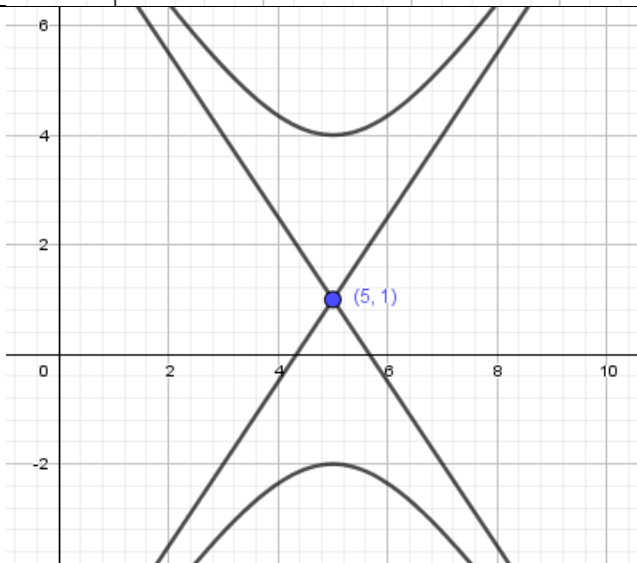
3.  $x^2 - 9y^2 + 2x - 54y - 81 = 0$



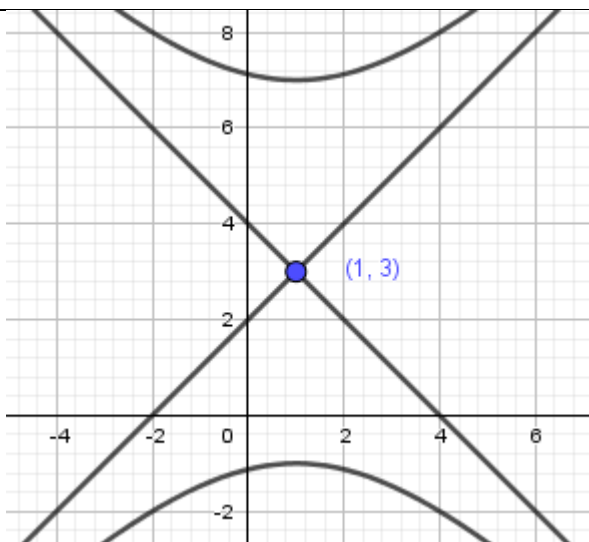
4.  $9y^2 - x^2 + 3x - 6y + \frac{11}{36} = 0$



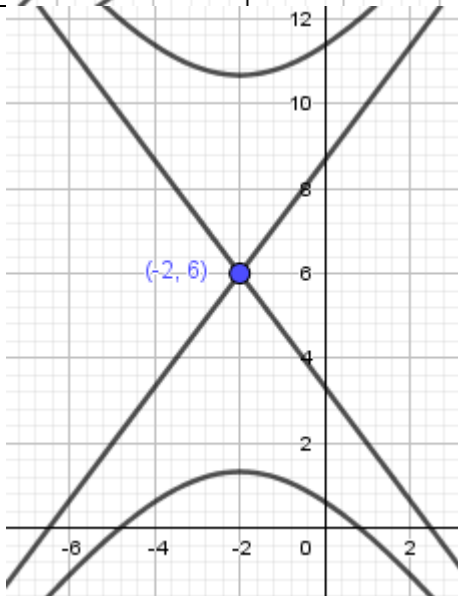
5.  $9x^2 - 4y^2 - 90x + 8y + 257 = 0$



6.  $y^2 - x^2 + 2x - 6y - 8 = 0$



7.  $16x^2 - 9y^2 + 64x + 108y = 64$



8.  $2x^2 - 7y^2 - 8x - 42y = 153$

