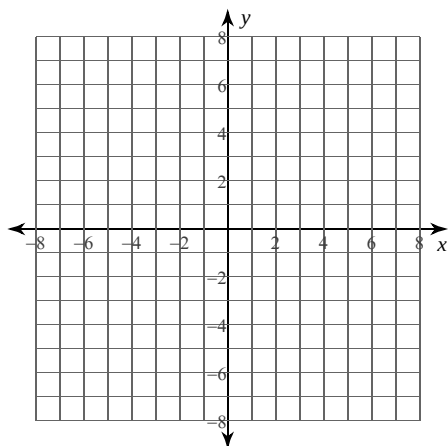
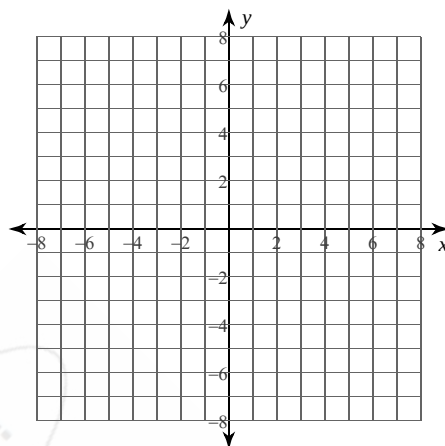


Identify the vertices and foci of each. Then sketch the graph.

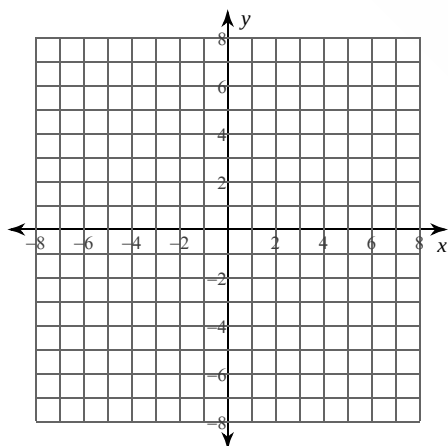
$$1) \frac{x^2}{5} - \frac{y^2}{25} = 1$$



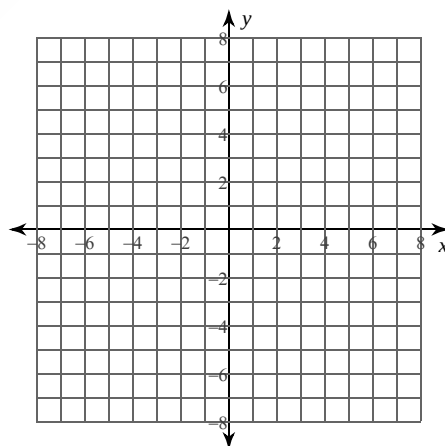
$$2) \frac{y^2}{25} - \frac{x^2}{16} = 1$$



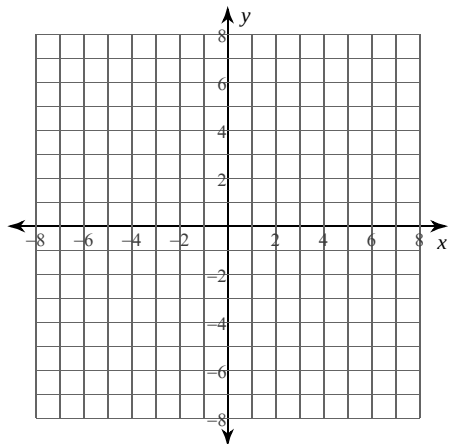
$$3) \frac{x^2}{25} - \frac{y^2}{16} = 1$$



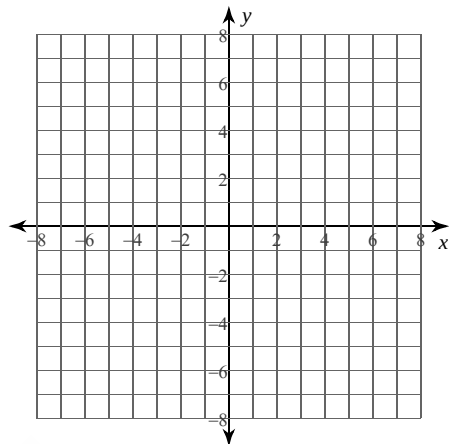
$$4) \frac{x^2}{9} - \frac{y^2}{4} = 1$$



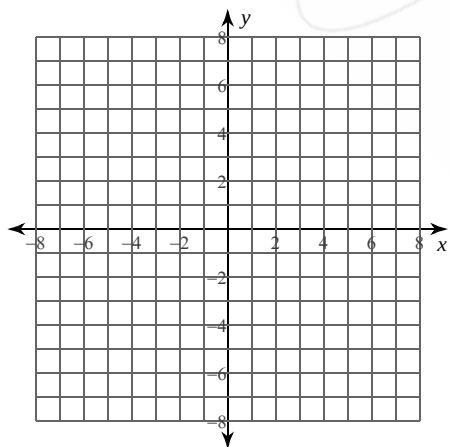
$$5) \frac{x^2}{9} - \frac{y^2}{16} = 1$$



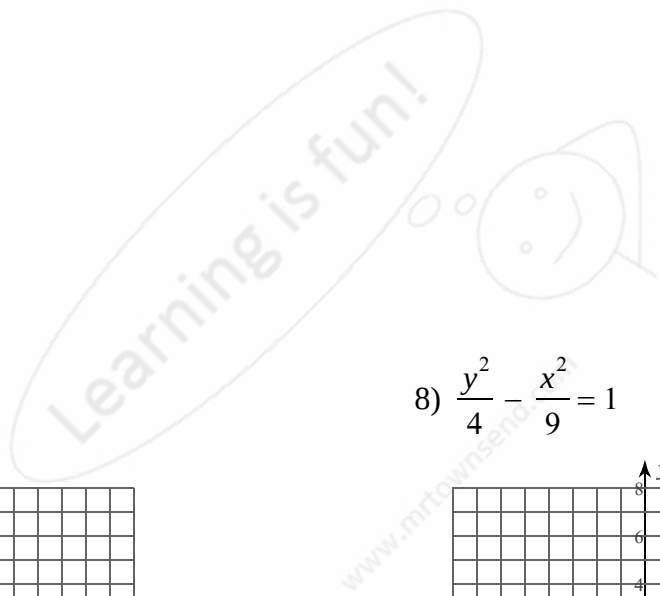
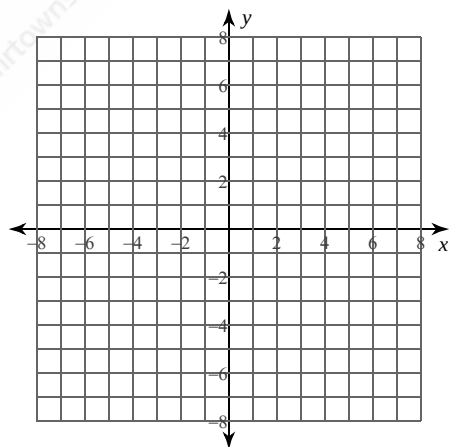
$$6) \frac{x^2}{25} - \frac{y^2}{9} = 1$$



$$7) \frac{x^2}{25} - \frac{y^2}{25} = 1$$

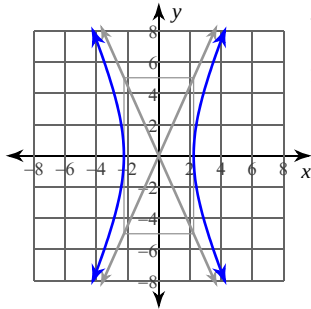


$$8) \frac{y^2}{4} - \frac{x^2}{9} = 1$$



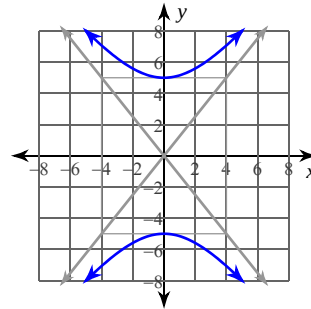
Answers to

1)



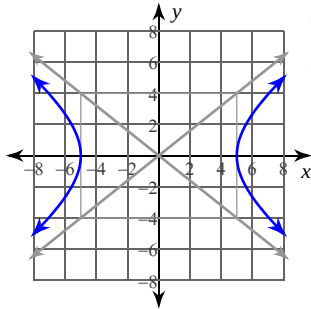
Vertices: $(\sqrt{5}, 0)$
 $(-\sqrt{5}, 0)$
 Foci: $(\sqrt{30}, 0)$
 $(-\sqrt{30}, 0)$

2)



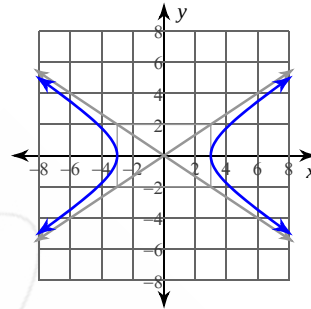
Vertices: $(0, 5)$
 $(0, -5)$
 Foci: $(0, \sqrt{41})$
 $(0, -\sqrt{41})$

3)



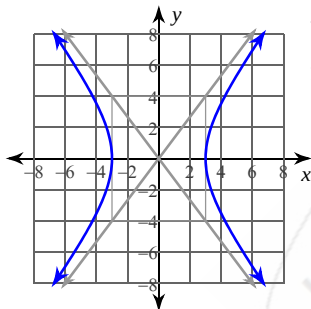
Vertices: $(5, 0)$
 $(-5, 0)$
 Foci: $(\sqrt{41}, 0)$
 $(-\sqrt{41}, 0)$

4)



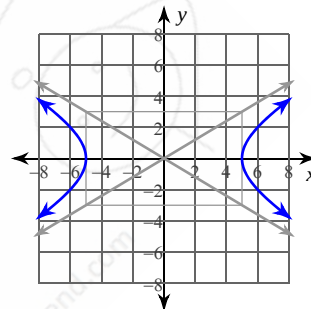
Vertices: $(3, 0)$
 $(-3, 0)$
 Foci: $(\sqrt{13}, 0)$
 $(-\sqrt{13}, 0)$

5)



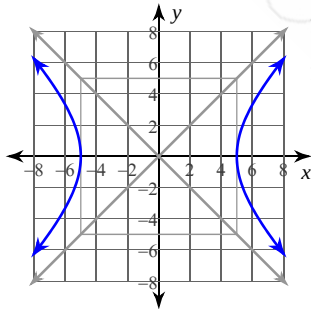
Vertices: $(3, 0)$
 $(-3, 0)$
 Foci: $(5, 0)$
 $(-5, 0)$

6)



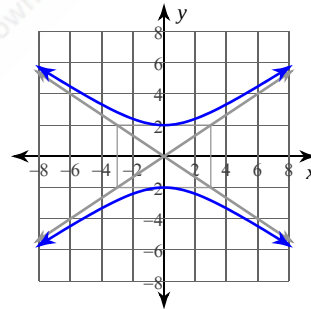
Vertices: $(5, 0)$
 $(-5, 0)$
 Foci: $(\sqrt{34}, 0)$
 $(-\sqrt{34}, 0)$

7)



Vertices: $(5, 0)$
 $(-5, 0)$
 Foci: $(5\sqrt{2}, 0)$
 $(-5\sqrt{2}, 0)$

8)



Vertices: $(0, 2)$
 $(0, -2)$
 Foci: $(0, \sqrt{13})$
 $(0, -\sqrt{13})$