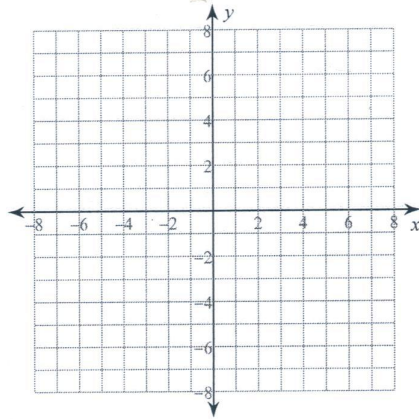


Hyperbola Assignment (Section H-3)

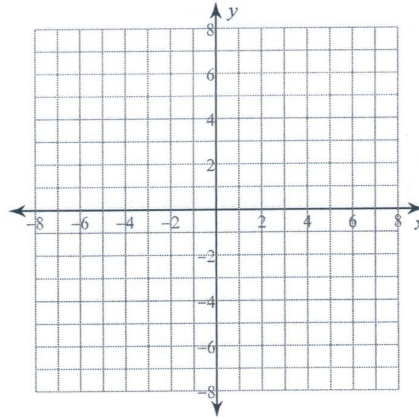
Identify the vertices, foci, length of the transverse axis, and length of the conjugate axis of each. Then sketch the graph. (V) (F) (TA) (CA)

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



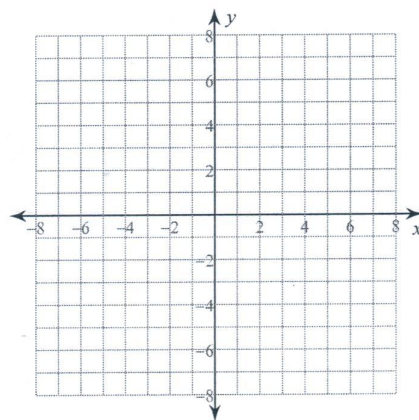
V:
F:
TA:
CA:

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



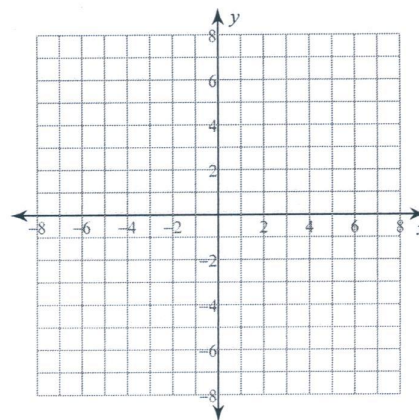
V:
F:
TA:
CA:

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



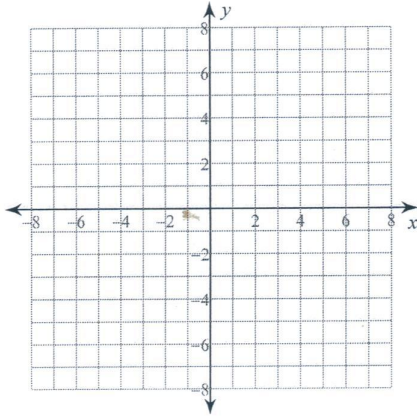
V:
F:
CA:
TA:

4) $\frac{y^2}{4} - \frac{x^2}{16} = 1$



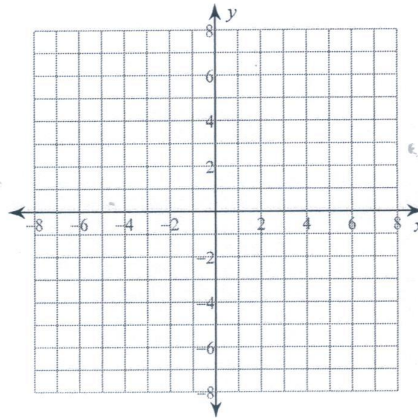
V:
F:
CA:
TA:

$$5) \frac{(y-3)^2}{4} - \frac{x^2}{25} = 1$$



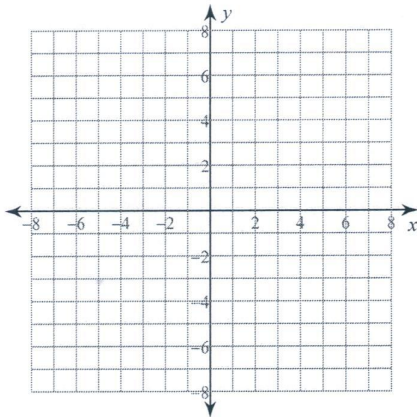
V:
F:
TA:
CA:

$$6) (y-3)^2 - \frac{(x-1)^2}{9} = 1$$



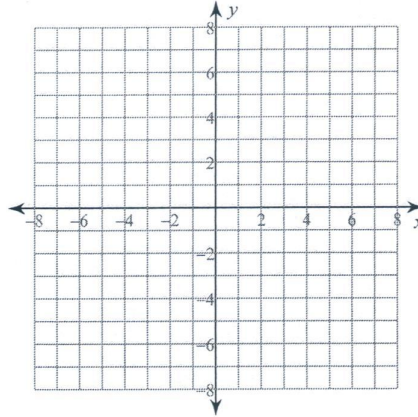
V:
F:
TA:
CA:

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



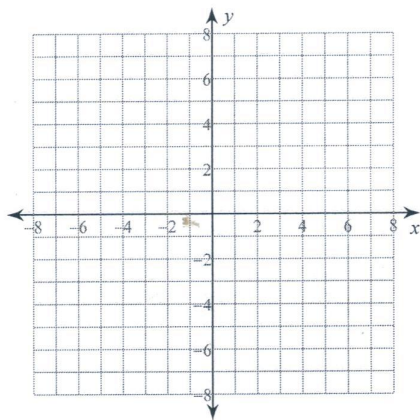
V:
F:
TA:
CA:

$$8) \frac{(y+1)^2}{16} - \frac{(x-3)^2}{4} = 1$$



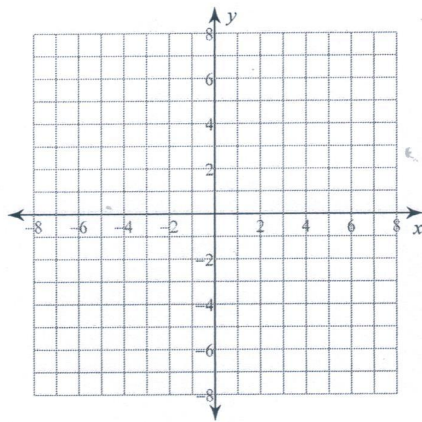
V:
F:
TA:
CA:

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



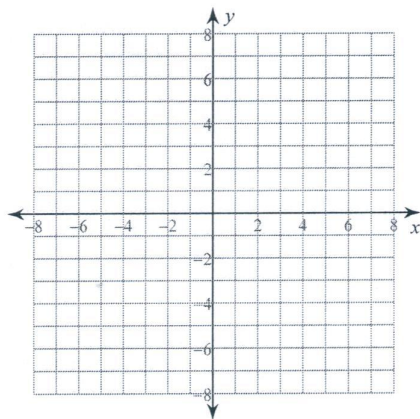
V:
F:
TA:
CA:

$$10) \frac{x^2}{25} - \frac{y^2}{9} = 1$$



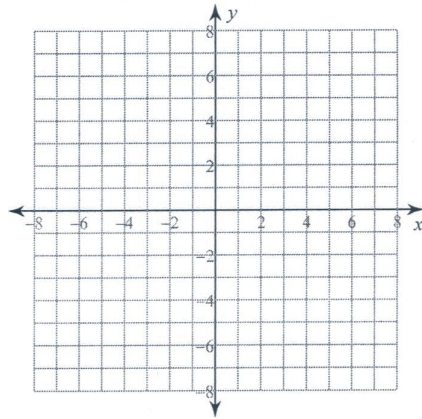
V:
F:
TA:
CA:

$$11) \frac{x^2}{4} - \frac{y^2}{16} = 1$$



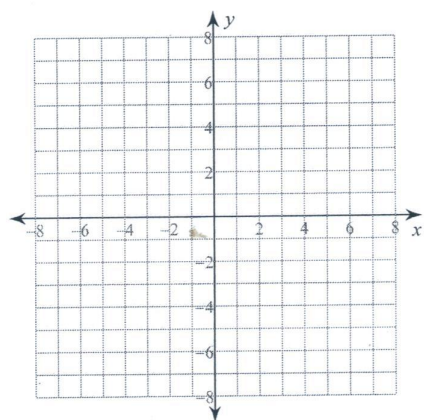
V:
F:
TA:
CA:

$$12) \frac{x^2}{16} - \frac{y^2}{16} = 1$$



V:
F:
TA:
CA:

$$13) \frac{(x+1)^2}{16} - \frac{(y+2)^2}{9} = 1$$



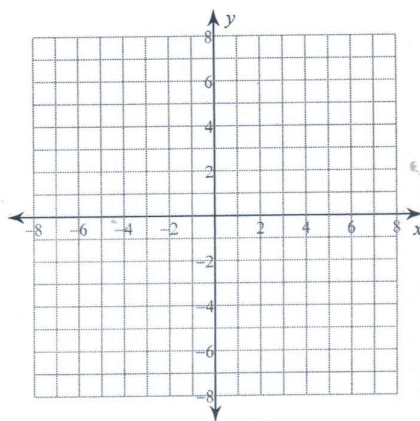
V:

F:

TA:

CA:

$$14) (x-2)^2 - \frac{(y+2)^2}{4} = 1$$



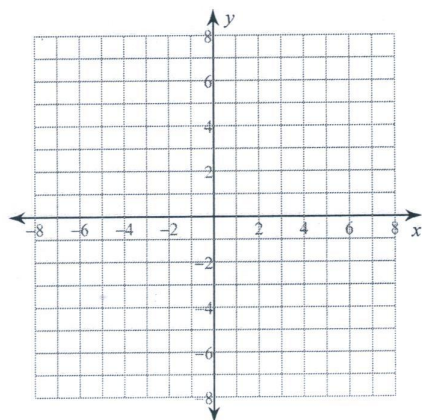
V:

F:

TA:

CA:

$$15) \frac{(x-2)^2}{4} - \frac{(y-1)^2}{9} = 1$$



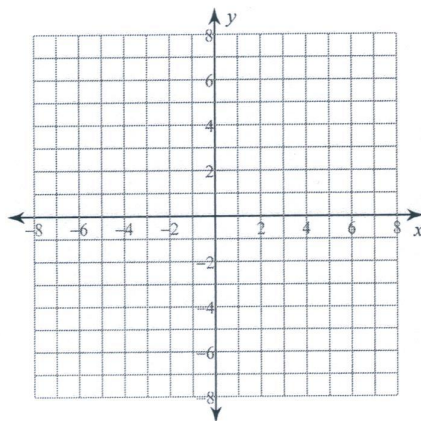
V:

F:

TA:

CA:

$$16) \frac{(x-2)^2}{9} - \frac{(y+3)^2}{4} = 1$$



V:

F:

TA:

CA: