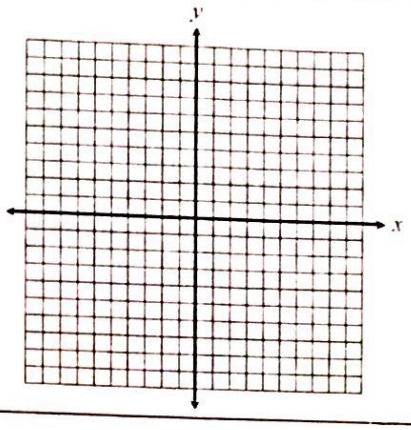
5. $4y^2 - 25x^2 = 100$

$\frac{4y^2}{100} - \frac{25x^2}{100} = \frac{100}{100}$

$\frac{y^2}{25} - \frac{x^2}{4} = 1$



Center: _____

Vertices: _____

Co-Vertices: _____

Foci: _____

Asymptotes: _____

_____

6. $x^2 - 9y^2 + 10x = -16$

$(\frac{10}{2})^2$

$(5)^2$

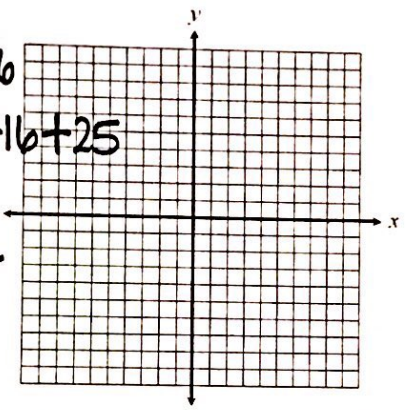
25

$x^2 + 10x - 9y^2 = -16$

$(x^2 + 10x + 25) - 9y^2 = -16 + 25$

$\frac{(x+5)^2}{9} - \frac{9y^2}{9} = \frac{9}{9}$

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



Center: _____

Vertices: _____

Co-Vertices: _____

Foci: _____

Asymptotes: _____

_____

7. $-36x^2 + y^2 - 6y = -45$

$(\frac{-6}{2})^2$

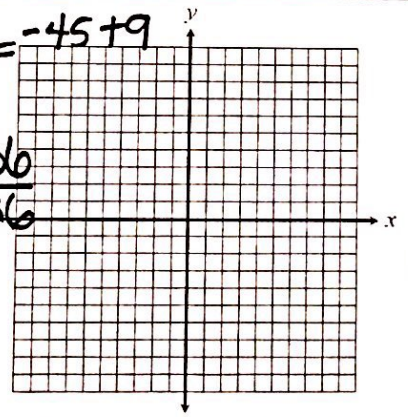
$(-3)^2$

9

$-36x^2 + (y^2 - 6y + 9) = -45 + 9$

$\frac{-36x^2}{-36} + \frac{(y-3)^2}{-36} = \frac{-36}{-36}$

$x^2 - \frac{(y-3)^2}{36} = 1$



Center: _____

Vertices: _____

Co-Vertices: _____

Foci: _____

Asymptotes: _____

_____

8. $-4x^2 + y^2 + 40x + 12y = 80$

$-4x^2 + 40x + y^2 + 12y = 80$

$-4(x^2 - 10x) + (y^2 + 12y) = 80$

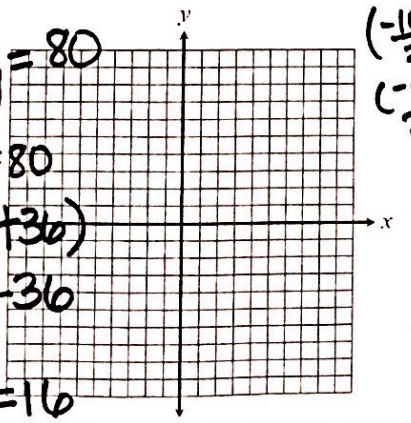
$-4(x^2 - 10x + 25) + (y^2 + 12y + 36) = 80 - 100 + 36$

$-4(x-5)^2 + (y+6)^2 = 16$

$\frac{-4(x-5)^2}{16} + \frac{(y+6)^2}{16} = \frac{16}{16}$

$-\frac{(x-5)^2}{4} + \frac{(y+6)^2}{16} = 1$

$(\frac{-10}{2})^2$ $(-5)^2$ 25 $(\frac{12}{2})^2$ $(6)^2$ 36



Center: _____

Vertices: _____

Co-Vertices: _____

Foci: _____

Asymptotes: _____

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$\frac{(y+6)^2}{16} - \frac{(x-5)^2}{4} = 1$