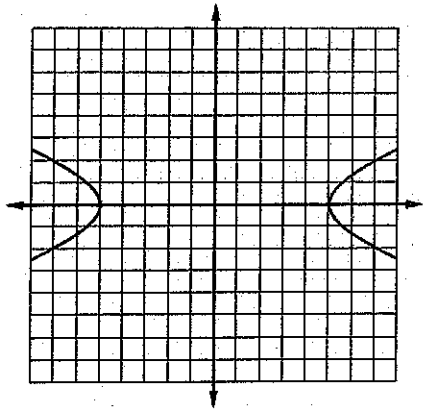


1

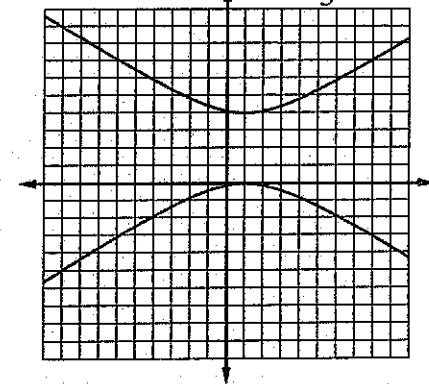
Find the equation of the hyperbola shown. (Hint: the length of the conjugate axis is 4).



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2

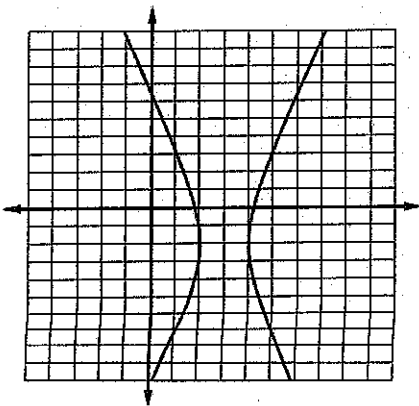
Find the equation of the hyperbola shown. (Hint: one of the asymptotes has the equation $y = 2 + \frac{2}{3}(x-1)$.)



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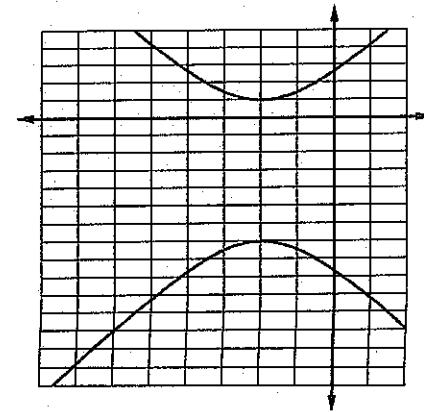
Find the equation of the hyperbola shown. (Hint: one of the asymptotes has an equation of $y = 3x - 11$).



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Find the equation of the hyperbola shown. (Hint: the length of the conjugate axis is 4).



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Find the equation of the hyperbola that has vertices at $(0, 4)$, $(0, -4)$ and foci at $(0, 6)$ and $(0, -6)$.

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Find the equation of the hyperbola that has vertices at $(5, 0)$ and $(-5, 0)$ and has a conjugate axis of length 12.

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Find the equation of the hyperbola that has vertices at $(4, 4)$ and $(4, 0)$ and foci at $(4, 5)$ and $(4, -1)$.

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Find the equation of the hyperbola that has vertices at $(13, 0)$ and $(-1, 0)$ and has asymptotes at $y = x - 6$ and $y = -x + 6$.

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Find the center, foci, and vertices of the hyperbola.

$$\frac{x^2}{25} - \frac{y^2}{144} = 1$$

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Find the asymptotes of the hyperbola.

$$\frac{(y-1)^2}{64} - \frac{(x+1)^2}{225} = 1$$

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Find the center, foci, and vertices of the hyperbola.

$$y^2 - 18x - x^2 - 14y - 132 = 0$$

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Find the asymptotes of the hyperbola.

$$9x^2 - 90x - 4y^2 + 32y - 163 = 0$$

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Graph the hyperbola on your answer sheet.

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

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Graph the hyperbola on your answer sheet.

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

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Graph the hyperbola on your answer sheet.

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

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16

Graph the hyperbola on your answer sheet.

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

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