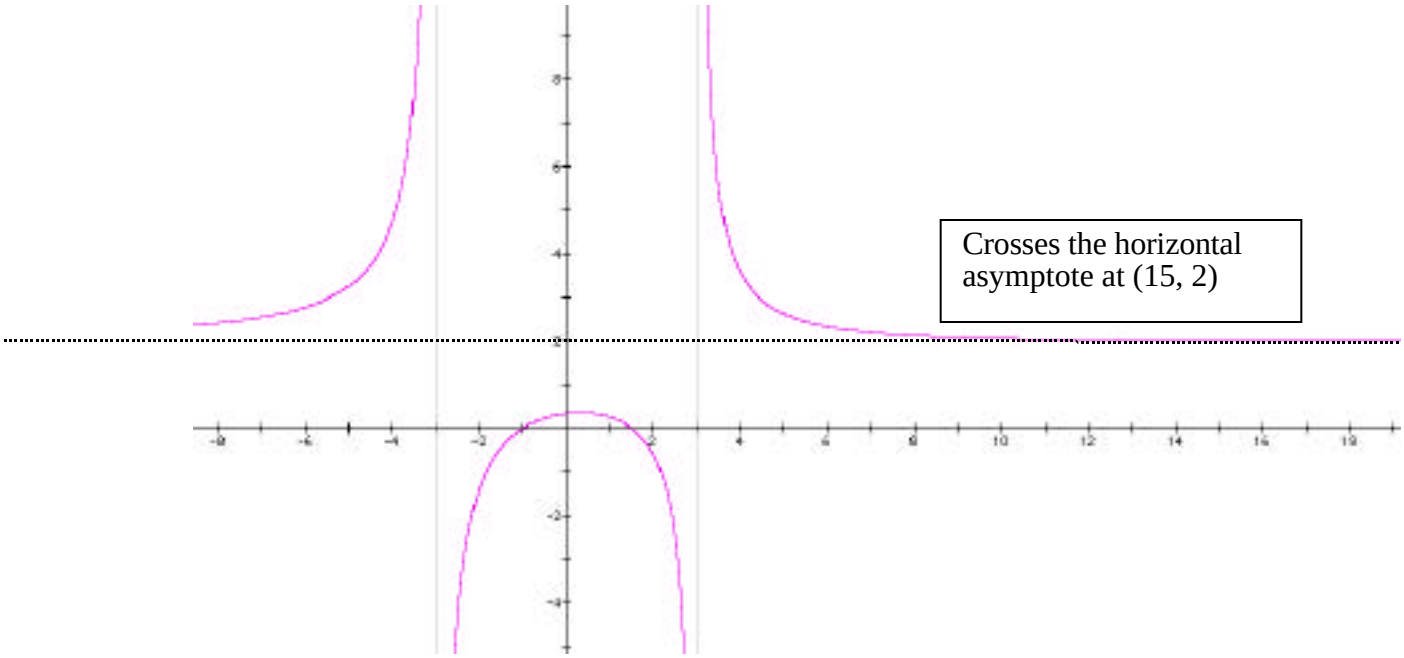
MA 154 Exam 3 Answers Fall 2001

1. $-68i-12j$
2. $\sqrt{65}$
3. $\theta = 163°$
4. $6cis\left(\frac{5\pi}{3}\right)$
5. $\frac{(x+4)^2}{16}+\frac{(y-2)^2}{4}=1$
6. $(x+4)=\frac{2}{3}(y-7)^2$
7. x-intercept(s): $\left(\frac{3}{2},0\right),(-1,0)$, y-intercept(s): $\left(0,\frac{1}{3}\right)$,
   Vertical asymptote(s): $x=3, x=-3$, Horizontal asymptote(s): $y=2$



8. Magnitude: 86.4 *lbs.*, Direction: 172.9°

9. Center: (0, 0), Vertices: (0, 7),(0,–7), Asymptotes: $y=\pm\frac{7}{4}x$