

```

In[21]:= a = 3;
         b = 1;
         c = 4;

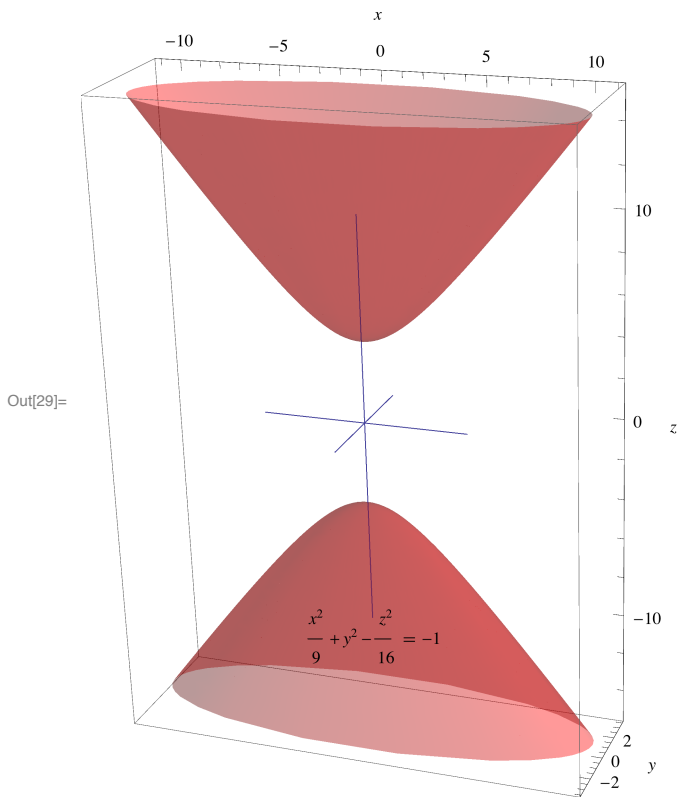
In[24]:= QH2 = ParametricPlot3D[{ {a Sinh[u] Cos[v], b Sinh[u] Sin[v], c Cosh[u]},
                                   {a Sinh[u] Cos[v], b Sinh[u] Sin[v], -c Cosh[u]}}, {u, 0, 2},
                                   {v, 0, 2 Pi}, PlotStyle -> {{Red, Opacity[0.4]}}, Mesh -> None,
                                   AspectRatio -> Automatic, AxesLabel -> {x, y, z}];

In[25]:= Oz = ParametricPlot3D[{0, 0, t}, {t, -10, 10}];
Ox = ParametricPlot3D[{t, 0, 0}, {t, -5, 5}];
Oy = ParametricPlot3D[{0, t, 0}, {t, -5, 5}];

In[28]:= TxtH2 = Graphics3D[Text[ $\frac{x^2}{a^2} + \frac{y^2}{b^2} - \frac{z^2}{c^2} = -1$ , {0, 0, -11}]]];

In[29]:= Show[QH2, Ox, Oy, Oz, TxtH2]

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In[30]:= ConAsimptotic = ParametricPlot3D[{a t Cos[s], b t Sin[s], c t},
                                             {t, -4.3, 4.3}, {s, 0, 2 Pi}, Mesh -> None, PlotStyle -> Opacity[0.4]];

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In[31]:= Show[ConAsimptotic, QH2, Ox, Oy, Oz]
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Out[31]=

