## Practice Building Equations

Build an exponential function in base something and base $e$ given that it passes through the indicated point. For base $e$, just get the exponent correct to one decimal (although you could use a graphing calculator to solve it more precisely).
1.

2.

3.

4. Through $(-3,4)$ and $(10,2)$ with a horizontal asymptote of $y=-5$
5. Through $(-6,-2)$ and $(-3,4)$ with a horizontal asymptote of $y=-9$
6. Through $(-9,5)$ and $(-1,4)$ with a horizontal asymptote of $y=7$
7. Through $(4,-5)$ and $(6,0)$ with a horizontal asymptote of $y=8$
8. Through $\left(x_{1}, y_{1}\right)$ and $\left(x_{2}, y_{2}\right)$ with a horizontal asymptote of $y=y_{0}$. Test your solution by using the other examples.

