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## Graphing Exponential and Logarithmic Functions - Guided Lesson

Complete the following problems:

1) Graph $f(x)=4^{2-x}$

Since $2-x$ is zero when $x=2$, we will choose $x$ values around 2 in our table of values. Also, let's graph $2^{x}$ on the same axes for comparison.
2) Graph $f(x)=\log _{4} x$.

Rewriting $f(x)=y=\log _{4} x$. in exponential form we get $x=4^{y}$. We can graph $x=4^{y}$ by using the same method for exponential function, except this time we will choose values for $y$ and then compute the corresponding values for x.
3) $\operatorname{Graph} f(x)=\log _{7} x$.

Rewriting $f(x)=y=\log _{7} x$. in exponential form we get $x=7^{y}$. We can graph $x=7^{y}$ by using the same method for exponential function, except this time we will choose values for $y$ and then compute the corresponding values for x.

