Name _____   Date _____

Graphing Exponential and Logarithmic Functions - Independent Practice Worksheet

Complete all the problems.

1. Graph $f(x) = 5^{3-x}$

Since 3-x is zero when x=3, we will choose x values around 3 in our table of values. Also, let's graph 5^x on the same axes for comparison.

2. Graph $f(x) = 7^{5-x}$

Since 5-x is zero when x=5, we will choose x values around 5 in our table of values. Also, let's graph 7^x on the same axes for comparison.

3. Graph $f(x) = 6^{4-x}$

Since 4-x is zero when x=4, we will choose x values around 4 in our table of values. Also, let's graph 6^x on the same axes for comparison.

4. Graph $f(x) = 8^{4-x}$

Since 4-x is zero when x=4, we will choose x values around 4 in our table of values. Also, let's graph 8^x on the same axes for comparison.

5. Graph $f(x) = 9^{7-x}$

Since 7-x is zero when x=7, we will choose x values around 7 in our table of values. Also, let's graph 9^x on the same axes for comparison.

6. Graph f(x) = $\log_9 x$.

Rewriting f(x)= y = $\log_9 x$. in exponential form we get x = 9^y. We can graph x=9^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.

7. Graph f(x) = $\log_6 x$.

Rewriting f(x)= y = $\log_6 x$. in exponential form we get x = 6^y. We can graph x=6^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.

8. Graph f(x) = $\log_2 x$.

Rewriting f(x)= y = $\log_2 x$. in exponential form we get x = 2^y. We can graph x=2^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.

9. Graph f(x) = $\log_{10} x$.

Rewriting f(x)= y = $\log_{10} x$. in exponential form we get x = 10^y. We can graph x=10^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.

10. Graph f(x) = $\log_8 x$.

Rewriting f(x)= y = $\log_8 x$. in exponential form we get x = 8^y. We can graph x=8^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.