Handout 2: Graphin' it up!

Graphing will be helpful with these problems. For answers involving where functions meet, the answers can be approximate.

1. What are the domain and range of $y = 3^x - 5$?

2. What are the domain and range of $y = log_4 4x^2$?

3. What are the domain and range of $y + 4 = log_1 0x + 3$?

4. What are the domain and range of $y = -3(4^x)$?

5. When will the exponential function $y = 5^x$ equal the linear function $y = 12x$?

6. When will the exponential function $y = 5^x$ equal the linear function $y = 3x$?

7. When will the logarithmic function $y = log x^5$ equal the linear function $y = 2x$?

8. When will the exponential function $y = e^x$ equal the logarithmic function $y = \ln x$?

9. Does the exponential function $y = \frac{2}{3}^x$ grow or decay exponentially?

10. Does the exponential function $y = 3e^{\frac{1}{2}x}$ grow or decay exponentially?

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