Math 30-2

Discovering Logarithms Activity

y

x

10

10

-10

-10

1. Graph  and state the following characteristics:

|  |  |
| --- | --- |
| Domain |  |
| Range |  |
| X-intercept(s) |  |
| Y-intercept(s) |  |
| End Behaviour |  |
| Equation of asymptote |  |

2. Graph  and state the following characteristics:

y

x

10

10

-10

-10

|  |  |
| --- | --- |
| Domain |  |
| Range |  |
| X-intercept(s) |  |
| Y-intercept(s) |  |
| End Behaviour |  |
| Equation of asymptote |  |

3. What relationship do you see between the domain and range of  and the domain and range of ?

4. What did you notice about the intercepts on each graph?

5. Where  has a horizontal asymptote,  has a .

6. These two equations are saying the same thing. Deduce the meaning of a logarithm.

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