| Honors Algebra II Notes Section 4.1 | | | |
|--|--|-------------------------------------|--|
| | | draph Exponential drow in Functions | |
| | | VOCABULARY | |
| Exponential Function: | | | |
| Exponential Growth Model: | | | |
| Growth Factor: | | | |
| Parent Function for Exponential Growth The function $f(x) = b^x$, where $b > 1$, is the parent function for the family of exponential growth functions with base b. The general shape of the graph of $f(x) = b^x$ is shown below. | | | |
| The x-axis is an asymptote of the graph. An asymptote is a line that a graph approaches more and more closely. (b > 1) The graph rises from left to right, passing through the points (0, 1) (0, 2) (0, 2) (| | | |
| The domain of $f(x) = b^x$ is all real numbers. The range is $y > 0$. | | | |
| EXAMPLE 1 Graph $y = 5^{\times}$. | | | |
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| -10 10 | | | |
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| Domain: | | | |
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| Range: | | | |
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