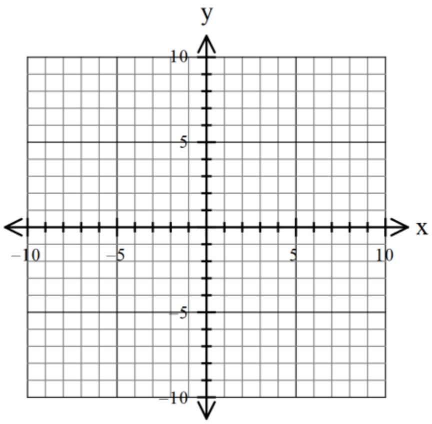
## Parent Functions #8

Name of Graph: ___________________________

Equation: _________________________________

| $x$ | $f(x)$ |
|---|---|
| | |
| | |
| | |




### Key Features

Domain:

Range:

$x$-intercept(s):

$y$-intercept:

Increasing:

Decreasing:

Constant:

Euler's Number:

Positive:

Negative:

Maximums /Minimums

Symmetry:

End Behavior:

$\lim\limits_{x \to -\infty} f(x) =$

$\lim\limits_{x \to \infty} f(x) =$

Asymptote: __________________________

Transformation Equation: ___________________________________

Inverse function:

$b =$ $c =$ $h =$ $k =$

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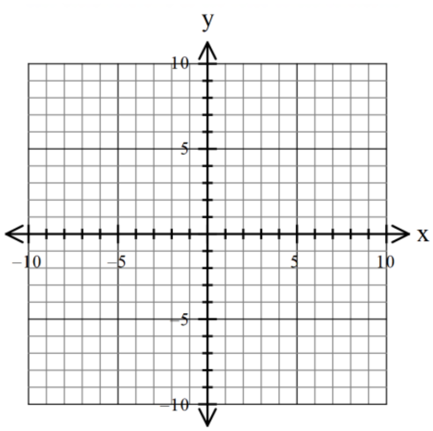

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# Steps for solving an exponential equation:

**Way 1**

1. get the bases the same
2. If the bases are the same, then the exponents are the same. So set the exponents equal to each other
3. solve for the variable

EX. $\frac{1}{5} = 125^{x-2}$

**Way 2**

1. get the base and exponent by itself
2. do inverse of exponential (write a log using "swirl")
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