## Exponential Growth

Online @ www.mathwarehouse.com/exponential-growth/graph-and-equation.php

## Which option would you chose? (circle one)

Option 1: You can have $\$ 1000$ a year for twenty years
Option 2: You can get $\$ 1$ the first year, $\$ 2$ the second, $\$ 4$ the $3{ }^{\text {rd }}$, doubling the amount each year for twenty years.

1) Determine how much you would gain at the end of 20 years for option 1 and for option 2.
2) Graph both options to see which will give you more money.

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|  | 12 | 4 | 1 | + | 101 | 214 | 416 | 18 |  |

## What exponential growth <br> function is graphed below?



Using the Graph below. Draw the graphs of $\mathrm{y}=4^{\mathrm{x}}$ and $\mathrm{y}=5^{\mathrm{x}}$

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Part II
Graph

2) $y=3\left(2^{x}\right)$

3) $y=2\left(4^{x}\right)$

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