## Exponential Functions

## $y=a \cdot b^{x}$

An exponential function is a function of the form $y=a \cdot b^{x}$ where $a \neq 0, b>0$ and not equal to 1 and $x$ is a real number.

Directions: Graph each exponential function.

1. $y=2^{x}$

2. $y=-(2)^{x}$

3. $y=\left(\frac{1}{2}\right)^{x}$

4. $y=-\left(\frac{1}{2}\right)^{x}$

5. $y=3 \cdot 2^{x}$

