Exponential Equations:

y = abx + k

**Exponential Growth:**

Examples: Graph:

 **\***the graphs have **asymptotes:**

**Exponential Decay:**

Examples: Graph:

**Finding Multipliers:**

 Percentage Increase

 Percentage Decrease

Exponential Growth/Decay Notes **KEY**

Exponential Equations:

y = abx + k

 initial value multiplier asymptote

 (y-intercept)

**Exponential Growth:**

a situation where something increases by a percentage

Examples: taxes, tips, interest, appreciation

 Graph:

**\***the graphs have **asymptotes:** lines the graph gets really close to but never touches

**Exponential Decay:**

a situation where something decreases by a percentage

Examples: discounts, depreciation

 Graph:

**Finding Multipliers:**

 Percentage Increase

 Change the percent to a decimal and add it to one

 Example: 5% tax .05 + 1 = 1.05

 Percentage Decrease

 Change the percent to a decimal and subtract it from one

 Example: 12% discount 1 – .12 = .88