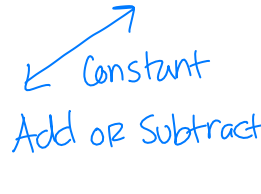
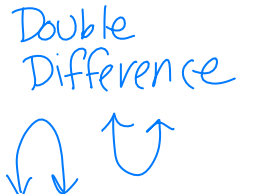

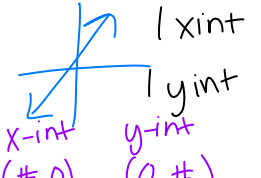
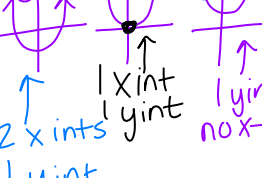
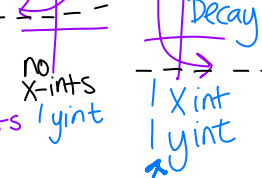
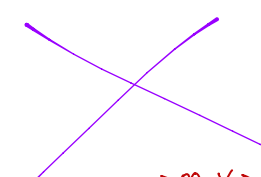
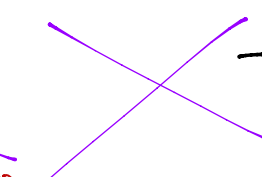
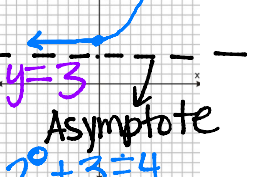
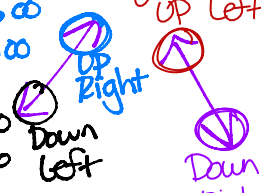
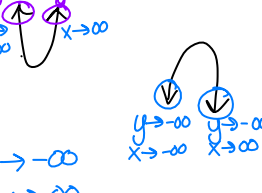
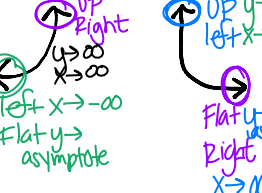


Compare and Contrast

Linear, Exponential and Quadratic Functions

How are the functions below similar or different?

Attribute	Linear $f(x) = 2x + 3$	Quadratic $f(x) = 2x^2 + 3$	Exponential $f(x) = 2^x + 3$
Rate of change	 <p>Constant Add or Subtract</p>	 <p>Double Difference</p>	 <p>Multiply</p>
Domain & Range	<p>Dom: $(-\infty, \infty)$ Range: $(-\infty, \infty)$</p>	<p>Dom: $(-\infty, \infty)$ Range: $[\#, \infty)$</p>	<p>Dom: $(-\infty, \infty)$ Range: (asymptote, ∞)</p>
Intercepts	 <p>1 x-int 1 y-int X-int $(\#, 0)$ y-int $(0, \#)$</p>	 <p>2 x-ints 1 y-int 1 x-int 1 y-int no x-ints no x-ints</p>	 <p>Decay no x-ints 1 y-int 1 x-int 1 y-int</p>
Asymptotes			 <p>$y=3$ Asymptote $2^0 + 3 = 4$</p>
End Behavior	 <p>$x \rightarrow \infty, y \rightarrow \infty$ UP Right $x \rightarrow -\infty, y \rightarrow -\infty$ Down Left $y \rightarrow \infty, x \rightarrow -\infty$ UP Left $y \rightarrow -\infty, x \rightarrow \infty$ Down Right</p>	 <p>$y \rightarrow \infty, x \rightarrow \infty$ UP Right $y \rightarrow \infty, x \rightarrow -\infty$ UP Left $y \rightarrow -\infty, x \rightarrow \infty$ Down Right $y \rightarrow -\infty, x \rightarrow -\infty$ Down Left</p>	 <p>UP Right $y \rightarrow \infty, x \rightarrow \infty$ Flat $y \rightarrow$ asymptote Left $x \rightarrow -\infty$ UP Left $y \rightarrow \infty, x \rightarrow -\infty$ Flat $y \rightarrow$ asymptote Right $x \rightarrow \infty$</p>