Determining Rate of Growth or Decay

Name_____

I. *Directions:* In each situation, state whether the equation is exponential growth or decay, and state the percent rate of change. Round to *nearest hundredths* if needed.

Equation	Growth or Decay	% Rate of Change
1. $y = (0.80)^x$		
2. $y = (1.5)^x$		
3. $y = 4(0.85)^x$		
4. $y = 0.3(1.25)^x$		
5. $y = (1.2)^{4x}$		
6. $y = (1.2)^{x/10}$		

Explain how to decide whether the equation is exponential growth or decay.

II. *Directions:* Match the exponential equation with its graph.

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