I. **Continuous** ***vs.*** **Discrete** (p.198):

1. A variable quantity which has an infinite and uncountable number of values is continuous.
2. A variable quantity which has either a finite or countable number of values is discrete.
3. Examples (p.206): #2, ______________________________

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II. Probability Distribution (p.199):

1. Graph, table, etc. which defines the probabilities assigned to all the possible (distinct) outcomes; same as a relative frequency distribution.
2. The sum of all of the probabilities equals one (or 100%).
3. Mean (*a.k.a.* expected value) is given by, $\mu_X = \sum x \cdot P(x)$

III. Examples (pp.206-208): #4,8,10,14

Create the probability distribution for tossing a fair coin twice, with the variable "x" representing the number of Heads obtained... n(s) = ____, S = { , , , }

x	$P(x)$	$x \cdot P(x)$
0		
1		
2		

$\sum x \cdot P(x) =$

Create the probability distribution for rolling a fair die, with the variable "x" representing the number of dots on the top face... n(s) = ____, S = { , , , , , }

...probability distribution for rolling a die...

x	$P(x)$	$x \cdot P(x)$
1		
2		
3		
4		
5		
6		

$$\sum x \cdot P(x) =$$

HW: pp.205-209 / #1,3,11abc,13bcd,15,17
Read pp.198-205 (section 5.1)
Read pp.212-221 (section 5.2)