**Java Annotation**

PROVIDE :: code snippets or comments you definitely want to provide

STUDENT-PROMPT :: a specifically-worded question you want to ask, or a general solicitation for input, etc

MUST-ANSWER-Q :: a question that must be resolved, that a majority of your class must understand before moving on

BIG IDEA :: an introduction of a new topic, a connection to prior lesson or discussion for application here in code, etc.

BEEG REVEAL :: this is gonna blow yer minds...

DELIBERATE-ERROR :: specific code snippet or a general approach that is a bad fit for the situation, is flat-out wrong, or will lead to a compile- or run-time error, etc.

FIRSTDRAFT :: code that will work for now, but which you intend to replace later

REVISION vX :: better versions of firstdraft code...

**BIG IDEA: Methods and Functions**

*//*  FIRSTDRAFT : ***What else do we need in this code so we know the code works?***

public int rollADie()

// MUST-ANSWER-Q…. Why no **parameters** or **inputs** in ()?

**//what is the purpose of the rollADie()? What does this do?**

{

**// Step 1: Create a random object to generate a random number**

**// from 1 - 6 to simulate a six sided die**

Random r = new Random();

**// PROMPT : should you use a more descriptive variable name instead of “r”?**

int valueOfDie = r.nextInt(6)+1;

**// STUDENT-PROMPT.. What does the + 1 do.**

return valueOfDie;

// MUST-ANSWER-Q : why do we need to return?

}

**//why are the parameters integers? What type of parameters are needed?**

public int[] generateDiceRolls(int numberOfSimulations)

**//what is the purpose of the rollADie()? What does this do?**

{

**// what needs to be revised in the next line?**

int[] diceRolls = new int[simulations];

**//STUDENT PROMPT: Why would we need an array to generate dice simulations?**

for (int i = 0; i < diceRolls.length; i++)

**// WHILE instead of for..while..loop**

**// how can this be rewritten as a while loop?**

{

// how do you call the method that rolls a dice?

// how would you store that value in each element of the array?

diceRolls[i] = RollADie();

}

**//what are we missing here?**

}

public int computeDiceSum(int[] values)

**//what is the purpose of the computeDiceSum()? What does this do?**

{

**// STUDENT PROMPT: where do we store the sum?**

int diceSums = 0;

// “traverse the array” to access every element of that array?

// what does “traverse the array” mean? Is it “traverse or transverse”?

for (int i = 0; i < values.length; i++)

**//why do we use < instead of <= here?**

{

diceSums = diceSums + values[i];

// will diceSums += values[i] work?

}

return diceSums;

}

**//BIG REVEAL: using methods to reuse a code over and over again without having to write it out repetitively**