Supplemental Instruction Handout

Fill in the blanks in this outline of notes for Mathematical Expressions and Formatting Output

Incomplete Outline

Formatting Output

computer holds

3.7 Formatting Output

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			lue is printed is called formatting	
2.	Strean	am Manipulators - A manipulator is a command that should be used in between cout statements		
	(i.e. c	cout <	<pre>< [manipulator] << [variable])</pre>	
	a.	setw	<pre>():</pre>	
		i.	This is how the cout object offers a way to provide a minimum amount of	
			for a certain value	
		ii.	The number inside the parentheses specifies	
		iii.	Should be used (before/after?) outputting a value	
		iv.	The values printed in the field arejustified by default	
	b.		:	
		i.	This gives one control of the number of significant digits with which floating-point values are displayed	
		ii.	Will display (rounded/unrounded?) values for a floating-point variable	
		iii.	The header file needed to use this manipulator is	
		iv.	Specifies amount of total digits	
	c.	fixed	d:	
		i.	Forces cout to to print digits in fixed-point notation	
		ii.	Can be used in combination with	
		iii.	When used with, specifies number of digits AFTER the decimal point	
	d.		:	
		i.	Displays trailing zeros	
		ii.	Should be used in combination with to limit the amount of zeros	
	e.	left	and right manipulators	
		i.	Purpose:	
<u>Math</u>	<u>emati</u>	<u>cal Ex</u>	<u>pressions</u>	
1.	Order	in whic	h an expression is evaluated:	
	A.	(), in	order, left to right	
	B.		, in order, left to right	
	C.		, in order, left to right	
2.		only us	ed expressions:	
	a.		takes the square root of a number	
	b.		- returns a random number between 0 and the largest int the	

Can be manipulated to return a number within a certain range using the modulus operator (%)