Course	ENGR 13300	Semester	Fall 24
Assignment Name	EX3 Team 1	Section	022
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<--- replace the shaded text with actual values</p>
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Problem Description /add a description and delete this comment/

1: Measu	red TSS values from Lake Wilso	n, NC
	TSS in mg/L	
	42.4	
	65.7	
	29.8 58.7	
	52.1	_
	55.8	_
	57	_
_	68.7	_
	67.3	_
	67.3	
	54.3	
	54	
	73.1 81.3	_
	59.9	_
	56.9	_
	62.2	_
	69.9	
	66.9	
	59	_
	56.3	_
	43.3	
	57.4	
	45.3	
	80.1	
	49.7	
	42.8	
	42.4	_
	59.6	_
	65.8	$\equiv$
	61.4	_
	64	
	64.2	
	72.6	
	72.5	
	46.1	
	53.1 56.1	
	67.2	_
	70.7	_
	42.6	_
	77.4	_
	54.7	_
	57.1	_
	77.3	_
	39.3	
	76.4	
	59.3	
	51.1 73.8	
		_
	61.4 73.1	
	77.3	_
	48.5	_
	89.8	_
	50.7	_
	52	_
	59.6	

Calculation	Section: SS smaller than 45 m	id/1
Table 2. IS I	TSS in mg/l	8/1
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Table 3: Calculation of descriptive statistics for given TSS data			
statistic	value	unit	
min	29.8	mg/L	
max	89.8	mg/L	
range	60	mg/L	
mean	59.9	mg/L	
median	59.5	mg/L	
mode	42.4	mg/L	
standard deviation	12.5	mg/L	
variance	156.2	mg^2/L^	
count	60		
		_	
Table 4: Computation of skewness			
description	value	unit	
skewness using SKEW()	-0.119019427	mg/L	

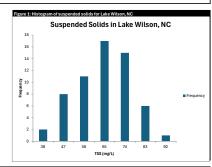
descri	ption	value	u
skewness using SKEW()		-0.11	19019427 m
	positive or negative> negative	ve	
	left or right skew> left		
skewness using relationship bet	ween mean and mode		17.5 m
	positive or negative> positive	e	
	left or right skew> right		
Identify if there are any difference	inces (ves or no)	ves	

description	value	un
number of bins using general rule	7	bin
bin width using general rule	8.571428571	mg
	7	bin
		mg
Updated values to make the histogram more presentable.	9	L
number of bins		
bin width		
bin upper limits	38	
	47	
	56	
	65	
	74	
	83	
	92	

Table 6: Count TSS greater than 55 mg/L		
description	value	unit
Number of TSS Measuements >55 mg/L		40 measurements







## Question b)

How did you choose the number of bins for the histogram?

We used the equation of square root of number of count and then we rounded the number

## Question c)

Indiana, like many other states, does not have a water quality standard for TSS. Review the information on TSS at http://www.in.gov/idem/rps/3484.htm. Does this take contain reasonable amounts of suspended solids, or should action be taken to reduce the concentration of TSS? Explain your reasoning and cite in APA format any addition sources you used.

This lake contains reasonable or close to reasonable amounts of TSS. The general range provided is between 25 and 80 mg/L. The measured average in this lake is 59.9 mg/L, while falls within the range. Other states have lower maximums, but some other areas also have higher maximums.