ACCURACY & PRECISION

Definitions:

ccuracy -	how close o	measurem	ent is to			
recision -	how close a	measureme	ent is to			
recision v	ersus Accur	acy:				
			ether the "	hits" are ac	curate, pre	cise, both accu
nd precise	, or neither	accurate no	or precise:	(Note: An a	ccurate "hit	" is a bulls eye
L L						
Team 1	Team 2	Team 3	Team 4	Team 5	Team 6	Team 7
2.65 cm	2.75 cm	2.80 cm	2.77 cm	2.60 cm	2.65 cm	2.68 cm
This is	erage leng the mean act the hig the range	or average hest value	from the	lowest val	ue:	cm.
	this numb		cr			
This is	the appro	ximate ± r	ange from	the avera	ige.	
The pr	ecision of	the measu	rement co	n be show	n as avera	ge ± range.
TOTAL CONTRACTOR	ecision of				_±.	cm.

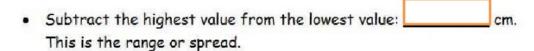


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A second group of students obtained the following data:

Team 8	Team 9	Team 10	Team 11	Team 12	Team 13	Team 14
2.60 cm	2.70 cm	2.80 cm	2.75 cm	2.65 cm	2.62 cm	2.78 cm

•	The average length is	cm.
	This is the mean or average.	



•	Divide this number by 2:	cm.			
	This is the approximate \pm range from the average				

•	The precision of the measurement can	be shown as	average ± range
	The precision of the measurement was	_±	cm.

In comparing groups, the first or the second, which group was more precise or was the precision the same? Justify your answer.

