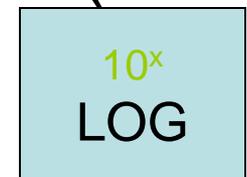
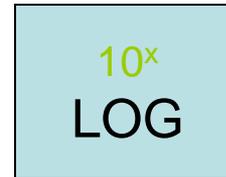


# GEOMETRIC MEAN

- Take the log value of each sample (log button on the calculator)
- Add the log value of each sample together
- Divide by the number of samples
- Take the antilog of the number for the geometric mean for the coliform result (the  $10^x$  button on the calculator).



# GEOMETRIC MEAN

# of Colonies	Log
6	= 0.77815
14	= 1.14612
31	= 1.49136
12	<u>= 1.07918</u>
Total	=4.494822

# GEOMETRIC MEAN

- Divide by 4 (number of samples) = 1.123706
- Take the Antilog ( $10^x$ ) = 13.2955
- Geometric Mean = 13 colonies/100 mL
- Report the Geometric Mean as 13 colonies/100 mL

# GEOMETRIC MEAN

Easiest way? Use Excel

- Enter numbers into a column
- At the next empty row type the command:  
`=geomean`
- select the cells with the numbers in  
parentheses: `=geomean(A1:A5)`
- Press enter!

Microsoft Excel - Book1

File Edit View Insert Format Tools Data

Save Undo Redo Cut Copy Paste

Font: Arial, Size: 10, Bold, Italic, Underline, Bullets, Numbering

	A	B	C	D	E
1	<i>E. coli</i> (cfu/100 ml)				
2	10				
3	100				
4	300				
5	15				
6	4				
7	=geomean(A2:A6)				
8					
9					
10					

Microsoft Excel - Book1

File Edit View Insert Format Tools Data Win

File Edit View Insert Format Tools Data Win

File Edit View Insert Format Tools Data Win

Arial 10 B I U

	A	B	C	D	E
1	<i>E. coli</i> (cfu/100 ml)				
2	10				
3	100				
4	300				
5	15				
6	4				
7	<b>28.25235</b>				
8					
9					