		The Sample size ranges from 8	The Sample size ranges from 16 to	The Sample size ranges from 36 to	The Sample size ranges from 73 to
		to 15.	35.	72.	100 and beyond.
Approximation of the mean. Each number in this table represents the average relative error of estimating the sample mean in 200 samples from an Exponential distribution.	LEGEND: The median approximation is represented by black crosses, Formula (4) is represented by blue boxes, and Formula (5) by red diamonds.	0.28 0.26 0.24 0.22 0.22 0.22 0.18 0.16 0.16 0.14 0.12 10 12 14	0.4 - 0.36 - 0.36 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0.26 - 0	0.65 0.55 0.45 0.45 0.45 0.45 0.45 0.45 0.45 0.45 0.45 0.45 0.45 0.45 0.45 0.55 0.45 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55	
	N/ 11	27 (7 N	20 0 C 0/	20 72 x	20 21 %
	Median	27.67%	28.96 %	29.73 %	30.21 %
	Formula (4)	19.91 %	34.77%	50.42 %	62.64 %
	Formula (5)	16.75 %	32.35 %	48.92 %	61.57 %
	Conclusion	Formula (5) is estimating the real sample mean with about 17% relative error (the formula (4) and the median are even worse)	All three of these formulas are not very close, but the median approximation starts being the best when the sample size reaches about 21.	The median continues to be the best estimator, separating itself from the other two formulas for the sample sizes in this range.	The averages stabilize and remain fairly steady as the sample size increases.
the standard deviation. Each number ents the average relative error of ple mean in 200 samples from an ution.	LEGEND: The Formula (12) is shown using black crosses, Formula (16) is represented by blue boxes; Range/4 by the green circles, and Range/6 by brown diamonds.	0.4		0.5 0.4 0.3 0.2 0.2 0.1 0.2 0.1 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	$ \begin{array}{c} 0.6 \\ 0.6 \\ 0.6 \\ 0.6 \\ 0.6 \\ 0.7 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 \\ 0.8 $
	Formula (12)	11.05 %	15.33 %	23.81 %	32.61 %
am] at of	Formula (16)	9.47 %	21.01 %	40.67 %	55.93 %
ion e s: dist	Range/4	17.38 %	11.00 %	17.51 %	27.31 %
nat le r al (Range/6	44.79 %	34.15 %	23.76 %	17.73 %
Approxin in this tab estimating Exponenti	Conclusion	Formula (16) is the best estimator of the standard deviation in this range of sample sizes.	The Range/4 formula takes over as the best estimate for the variance	The Range/4 formula is slowly losing its advantage, and the Range/6 formula is closing in after the sample size reaches about 66.	The Range/6 keeps the lead in accuracy as the sample sizes increase.

TABLE 4: Exponential Distribution with the parameter $\lambda = 10$.