

Math 1B

Midterm 3 Review Answers

[1]	[a]	$\frac{2}{27}$	[b]	diverges	[c]	$\frac{\pi}{2}$	[d]	diverges
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	[e]	$\ln 2$	[f]	$\frac{\pi}{2}$	[g]	2	[h]	diverges
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	[i]	diverges
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[2]	[a]	diverges – compare to $\frac{1}{x}$	[b]	converges – compare to $\frac{3}{x^2}$
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	[c]	converges – compare to e^{-x}	[d]	diverges – compare to $\frac{1}{x}$
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	[e]	diverges – find antiderivative and take limit	[f]	diverges – compare to $\frac{1}{x}$
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	[g]	converges – compare to $\frac{1}{e^x}$
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[3]	[a]	62	[b]	63	[c]	$63\frac{1}{3}$
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[4]	[a]	[i]	0.136%	[ii]	$\frac{343}{1350}$
	[b]	[i]	-0.277%	[ii]	$\frac{343}{675}$
	[c]	[i]	-0.019%	[ii]	$\frac{941192}{72900000}$