

Math 1B
Midterm 1
Review Answers

[1] 142190

[2] $\lim_{n \rightarrow \infty} \frac{112n + 40}{n} = 112$

[3] [a] 58 [b] 52 [c] 42

[4] [a] less than [b] greater than [c] greater than [d] less than

[5] $\frac{37}{3}$

[6] $\frac{1+2\sqrt{7}}{3}$

[7] $\frac{8}{3}$

[8] [a] $2x\sqrt{16-x^4}$ [b] $y - 4\pi = 0(x - 2)$ OR $y = 4\pi$

[9] $3 \ln 22$

[10] local maximum at $t = -6$, local minimum at $t = 2$

[11] $\frac{e^4 - 1}{2}$

[12] $\int_{\frac{1}{4}}^{\frac{1}{9}} -\frac{f(u)}{2u} du$ OR $\int_{\frac{1}{9}}^{\frac{1}{4}} \frac{f(u)}{2u} du$

[13] [a] [i] 0.136% [ii] .2540740741
[b] [i] 0.277% [ii] .5081481481
[c] [i] 0.00162% [ii] .1291072702

[14] [a] 62 [b] 63 [c] $63\frac{1}{3}$