

## Calc C Extra Practice for Some Review Topics

Below is a list of problems from the book that are examples of some topics for more practice and discussion for review. I tried to choose new problems that were not already assigned on homework, but a few are repeats. I hope this helps. Most are odd, so you can check your work in the back.

This will not be graded or collected. It is for your own practice and review.

### Calc C Extra Practice for Some Review Topics

- 1) Limits with Logarithms: Section 4.4 (p. 305) #55
- 2) Telescoping Series: Ch. 11 Review (p. 759) #28
- 3) Integral Test: Section 11.3 (p. 704) #23
- 4) Power Series: Section 11.8 (p. 727) #17
- 5) Geometric Power Series: Section 11.9 (p. 733) #20 (only the power series representation part) Use a “map.”
- 6) Taylor Polynomials: Ch. 11 Review (p. 760) #57a
- 7) Orthogonal Trajectories: Ch. 9 Review (p. 616) #13
- 8) Slope and Parametric Equations: Section 10.2 (p. 636) #9
- 9) Area in Polar: Section 10.4 (p. 653) #27

Limits: For (10) - (13), draw a sketch with key variables ( $\delta$ ,  $\epsilon$ ,  $M$ ,  $N$ ,  $L$ ,  $C$ , etc.) along with the proof.

- 10) Ch. 2 Review (p. 167) #25
- 11) Ch. 2 Review (p. 167) #28
- 12) Section 2.6 (p. 143) #67
- 13) Section 2.6 (p. 143) #68

### Additional Answers

2) Ch. 11 Review #28:  $11/18$

5) 11.9 #20:  $\ln 4 + \sum_{n=0}^{\infty} \frac{2(-1)^n x^{2n+2}}{4^{n+1} 2n+2}, R = 2$

10) Ch. 2 Review #25:  $\delta = \frac{\epsilon}{5}$

11) Ch. 2 Review #28:  $\delta = \frac{4}{M^2}$

13) 2.6 #68:  $N = \sqrt[3]{M}$