

Text: **James Stewart**, *Precalculus Mathematics for Calculus*, 7th Edition, Cengage learning.

Below is a list of review problems to help you prepare for the exam on Wednesday, February 21. In addition to these you should be looking over class notes and in class quizzes.

2.1: 23, 25, 27, 33, 43, 44, 49, 58, 64, 65, 69

2.2: 35, 45, 49, 51, 54, 55

Additional Instructions: For all graphing problems, also label all x and y intercepts with their coordinates.

2.3: 7a-c (also for 7 find the intervals of x on which $h(x) > 0$), 8a-d (for 8d, find the interval(s) on which $g(x) < 0$), 31, 33, 43, 45

3.7: 3, 17, 19, 23, 31

Additional required problems: all additional 2.3/2.7 homework problems in Canvas regarding determining where $f(x) > 0$ and $f(x) < 0$

2.6 7, 9a, 11, 14a, 21, 22, 25, 26, 27, 28, 30, 31, 35, 45, 49, 65, 72a-e, 86, 87, 90, 91, 92

Additional required problems: all additional 2.6/3.6 homework problems in Canvas regarding graphing piecewise-defined functions

Additional Instructions: Label x and y intercepts with their coordinates for all graphing problems

3.6: 13, 17 (this can be rewritten $\frac{1}{x-2} + 2$), 23 (Extra: Find the value(s) of x for which $t(x) = -5$), 29, 32, (Extra: Find the value(s) of x for which $r(x) = \frac{3}{8}$), 33, 35, 41

Additional Instructions: Label asymptotes with their equations and x and y intercepts with their coordinates for all graphing problems

2.7: 11, 13, 15 (write your answers as a single simplified fraction), 27, 29, 49, 52, 56, 58, 63, 67

2.8: 7, 9, 11, 25, 37, 39, 40, 43, 45, 49, 53, 55, 56, 61, 67, 73

Additional Instructions: For problems assigned from 37- 45, make sure to show both function compositions. For problems assigned from numbers 50-68, also find the domain and range in interval notation for f and f^{-1} .

Chapter 2 Review: 74, 84(a-d) Note: for problem 84, add the domain restriction of $x \geq 0$ for the function $f(x)$. **EXTRA 1:** state the domains for 84ab. **EXTRA 2:** What do the answers to 84a and 84b say about the relationship between f and g ?

*The answers to all odd problems can be found in the back of the text. The answers to even problems and the extra problems will be made available in Canvas.

PASS Sessions coming up before the exam are

Saturday, February 17, 12:00pm-12:50pm <https://temple.zoom.us/j/94295770572>

Monday, February 19, 4:00pm-4:50pm Charles Library 201

Tuesday, February 20, 2:00pm-2:50pm Charles Library 201

Tuesday, February 20, 6:00pm-6:50pm Charles Library 340

MCC Review

Monday, February 19, 5:00pm-7:00pm Tuttleman 101

SSC Study Studio

Tuesday, February 20, 7:00pm-8:30pm Charles Library 340