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](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