

Do NOT write your name anywhere. (Canvas will tell me who turned in the exam.) Take pictures of your answers and use your own software or <https://pdfcandy.com/> to create a PDF for each answer which requires an upload. If it is large, resize it to A4. Upload that to Canvas. Upload each answer as a separate file with that question. Failure to follow directions will cost you one point. People with Apple products may need to use CamScanner app.

You are not allowed to use your books, notes, the internet, or other people when taking this test. You can use the internet to access Canvas and to convert your answers to PDF files. Nothing else.

If you run out of time or lose your internet connection, you can do a second submission. You do NOT have to redo the questions you already did. I will be able to see every submission. If you have problems, you can always contact me via Zoom or e-mail. If you use Zoom, open it in a new tab or window.

Failure to follow these directions will cost you 1 point. The test has 100 points (to be scaled up to 140 points) and is scheduled to take 50 minutes. Therefore, expect to spend 1 minute for every 2 points. For example, a 12-point question should take 6 minutes. I have it set up to only give you an hour and a half.

Show all work on all questions.

1) (8 points) Calculate $(3+7)(4-5)+10/2-9/3$

2) (16 points) Simplify $(X+Y)^3 - (X^3+Y^3)$

3) (16 points) Solve for X. $\left| \frac{1-X}{X^2-1} \right| = \frac{1}{2}$

4) (14 points) Simplify $\frac{X^2-2X-3}{X^2+5X+4} \div \frac{X^2-9}{X^2-16}$

5) (16 points) Solve $R-3 = \sqrt{6-2R}$

6) (12 points) Simplify $\frac{3+\sqrt{7}}{3-\sqrt{7}}$

7) (4 points) EITHER write the US government debt of approximately \$2,920,000,000,000 in scientific notation OR tell me what the *multiplicative inverse* for a number X is and briefly tell me why it is important.

8) (14 points) Simplify $\frac{3-2X}{14} - \frac{7-X}{21}$