ACMAT100 Fall 2023 Professor Manguba-Glover Homework 1 (1.3-1.4)

Name:

Show all work and circle/box your answers. If you do the problem incorrectly, or don't show sufficient work, you will be asked to rewrite the problem for credit.

Suggested due date: next class period. Final due date: the day of the Unit 1 Exam.

(1) Evaluate the following without using a calculator (i.e. don't give decimal answers). Simplify your answers.

(a) 
$$-\frac{1}{4} + \left(-\frac{1}{6}\right)$$
  
(b)  $-\frac{4}{3} + \frac{3}{8}$   
(c)  $\left(-\frac{3}{5} - \frac{4}{9}\right) - \left(-\frac{2}{3}\right)$   
(d)  $\left(\frac{3}{5} + \frac{3}{4}\right) - \frac{1}{2}$ 

(2) Evaluate each expression without using a calculator. Simplify your answers.

(a) 
$$\left|\frac{-7}{6}\right| \div \left|-\frac{1}{2}\right|$$
  
(b)  $\frac{6-\left|-4\right|-4(8-5)}{\left|8-2(3)\right|}$ 
(c)  $\frac{2}{3} \div \frac{2}{7} \cdot \frac{1}{2} - \frac{3}{5} \cdot \frac{1}{3} \div \frac{2}{9}$ 
(d)  $\frac{3(12-9)}{-3} - \frac{2(3-4)}{4-(-2)}$