

Extra Credit for Exam 1

Due Monday, June 28, 8:30 a.m. No late assignments will be accepted.

Directions: Show all work for full credit. Simplify all answers completely. Clearly indicate all answers. You are allowed to use the textbook, your class notes, homework problems, quizzes, and exam as references.

Work independently. You may only ask the instructor for help on this assignment. Do not use a calculator.

Do the problems in order on a separate sheet of paper. Be sure to staple multiple page assignments and tear off rough edges before handing in this assignment.

This assignment is worth a maximum of 10 points. The points you earn will be added to your score from Exam 1. You must hand in Exam 1 with this assignment.

1. Solve the following equation: (2 points)

$$|3x + 5| = \frac{|9x - 1|}{3}$$

2. Solve the following inequality: (3 points)

$$\frac{|2x - 4|}{3} < 6$$

3. (a) Write the equation of the line that is perpendicular to $3x - 4y = 12$ that passes through the point $(\frac{3}{2}, -4)$. Give your answer in slope-intercept form. (3 points)
(b) What is the x -intercept of this line? (2 points)