

Homework 1 - Math 1451-008 (Howle)
Due Monday 1/30/2012 in class

Name:

R Number:

This cover sheet must be attached as the top page of your homework.
See homework requirements in the syllabus.

1. Algebra review question: Charlie is a student taking Calculus 1. According to the course syllabus her course grade will be determined as follows: webwork assignments (10%), written homework (10%), five in-class exams (50% total), final exam (30%).
 - (a) If Charlie has a 97% average on her webwork, an 85% average on her written homework, and an 88% average on her in-class exams, what is her current percentage grade in the course? (Find a general formula, then apply it to the numbers given in this problem.)
 - (b) If she wants to make an A (90%) in the course, what score does she need to get on the final exam?
2. Find the slope, y-intercept, and x-intercept of the following line. Sketch a graph of the line and label the x and y intercepts on your graph.

$$5x + 3y - 15 = 0.$$

3. Find an equation for the line passing through the point (4,5) and parallel to the line that passes through the points (2, 1) and (5, 9). Express your answer in slope-intercept form.
4. Sketch a graph of $y = \cos(x)$. Clearly indicate a restricted interval on which the inverse exists and sketch a graph of the inverse $y = \cos^{-1}(x)$.