Homework for Week 1

Written Homework

Your carefully written solutions to the following questions will be due at the beginning of class on Wednesday, April 8.

1. A racer drives his car for 30 minutes at a speed of $90 \text{ miles/hour}$. Then he speeds up and drives at $120 \text{ miles/hour}$ for 15 minutes. What was the driver’s average speed during this race? (Hint: Use the times as weights.)

2. A student is trying to decide whether withdrawal from a basketweaving class in which he is not doing well. The class is worth 5 credits. The student is taking two other classes, also for 5 credits each, and earning grades of 3.0 in each of them. If the student does withdrawal, then the 5 credits for the basketweaving are not used in calculating the GPA (so it will be as if he was only taking 10 credits).

Determine the students GPA if he withdrawals from the class; then determine his grade if he doesn’t withdrawal and instead earns a 0.0 for basketweaving. How much does this change his GPA for the quarter?

3. Solve each of the linear equations below. For each question, explain what steps you perform to isolate $x$.

(a) $4x = 12$
(b) $x + 4 = -1$
(c) $x - 1 = 6$
(d) $2x + 1 = 8$
(e) $7 - x = 9$
(f) $5x - 7 = x + 2$

Comments on Homework Grading

To get full credit, a problem must be solved correctly, completely, with all relevant work shown, and it must be easy to read. It must also be presented clearly, with well-written explanations. (Basically, you should pretend you are writing a solution for a textbook.) Sloppy or incomplete work will not receive full credit, even if the solution is correct.

More on back...
Begin each problem on the left side of the page – do not work in columns. Submit the problems in the order they are listed on the assignment sheet.

Use plain white or lined paper, not graph paper, not engineering paper. If you need to include a graph drawn by hand, you may attach a sheet of graph paper for the figure only. (Better yet, cut the graph from the graph paper and paste it to the solution.) If you use notebook paper, make sure you remove all fringe edges from the paper where it is torn out of the notebook.

Leave space for your instructor to write comments. Do not squeeze solutions onto the page.

Don’t turn in pages with work crossed out. Erase fully if using a pencil, or use white-out if using pen. (Using pencil is strongly recommended.) If there is too much to erase or white-out, start over on a new sheet of paper.

You are strongly encouraged to make use of rough drafts before writing up your final submission.

These rules apply to all homework assignments in this course.