

WebAssign General and Specific Hints: Lessons 23 – 32

For typing answers into WebAssign in the correct form, the best guides are the odd-numbered answers in the back of the textbook, the even answers to book problems on the course website, and the answers in the textbook's examples.

When you click on an answer box in WebAssign, the calcPad will appear, if needed. The calcPad not only has options for fractions, exponents, radicals, etc., there are also subheadings with other options, such as inequality signs, logarithms, unions, etc. Be sure to familiarize yourself with the different features of the calcPad, including each subheading (Functions, Relations, etc.).

You can submit answers to each individual problem up to 100 times until the due date/time for the assignment has passed. Any problem that is correctly answered 6 hours or more before the due date will earn a 10% bonus. The only time you will receive a point deduction for attempting a problem more than once is when you are completing multiple choice problems. Read through the WebAssign Bonus/Penalty document for more information.

A perfect score on a homework assignment is not necessarily an indication that a student understands everything on that particular assignment. With multiple attempts and the early submission bonus, students can earn a 100% (or more) on an assignment simply by being persistent. All students are encouraged to complete their homework as early as possible, and to answer each homework problem until they get it correct. However, if you require multiple attempts to answer a homework problem, you need to go back and review that type of problem before quizzes and exams. On quizzes and exams, you will not have multiple attempts, bonus, or unlimited time.

GENERAL HW HINT:

- NEVER give an approximate answer to a question unless a problem specifically asks you to approximate. ALWAYS enter exact answers, unless the directions state otherwise.
- ALWAYS use the correct case for letters and symbols; if its lower case in the problem, it should be lower case in the answer
- When graphing lines, parabolas, circles, etc., do not start by plotting points in WebAssign. Simply use the graphing tools available (tutorials are available on the graphs before you begin).

TI-30XA TIPS:

- To use the memory function, use the STO key to store a number in either memory 1, 2, or 3.
 - o To store the product of 15π , hit $15 \times \pi = \text{STO } 1$; you will now have 47.1238898 stored in memory 1 (M1)
 - o To recall the value that is being stored in memory 1 (M1), use the RCL button.
 - RCL 1
 - You do not need to hit the = key to recall a value
 - o To clear out a memory, type STO followed by either 1, 2, or 3
 - To clear out the value being stored in memory 1 (M1), hit STO 1

- When a value is being store in memory 1, you will see M1 in the upper left hand corner of the screen
 - When a memory is cleared, the M1 will disappear
- To enter a fraction or a mixed number into the calculator, use the $a^{b/c}$ key near the bottom left-hand corner (just above the \leftarrow key).
 - $\frac{1}{2}$ is entered 1 $a^{b/c}$ 2
 - $3\frac{1}{2}$ is entered 3 $a^{b/c}$ 1 $a^{b/c}$ 2
- To change from a mixed number to an improper fraction, use the 2nd function on the $a^{b/c}$ key (d/c).
 - To convert $3\frac{1}{2}$ to $\frac{7}{2}$, hit 2nd $a^{b/c}$
 - $\frac{3}{2} + \frac{3}{4} = 2\frac{1}{4}$; to convert this to an improper fraction, hit 2nd $a^{b/c}$
 - You do not need to use the = key
- To change from a decimal to a mixed number or a fraction, use the 2nd function on the \leftarrow key in the bottom left-hand corner.
 - $14 \div 49 = 0.2857 \dots$; to convert this to a fraction, hit 2nd \leftarrow
 - You do not need to use the = key
 - This will not work every time, because not every decimal can be written as a fraction
- To raise any base to any power, use the y^x key located directly above the division key
 - 3^5 is entered 3 y^x 5 =
 - This will not work every time, because not every base can be raised to any power
 - -2 cannot be taken to the power of $\frac{1}{2}$ because the square root of -2 does not exist with real numbers
 - 0 cannot be taken to a negative power because division by zero is not possible

Lesson 23 assignment:

- On problem #1, the graph of the function f given at the beginning of the problem is used to answer each part of the problem (parts a – j). Rather than scrolling back and forth to view the original graph, you may want to print the original graph, or copy it yourself on graph paper.
- Read the directions very carefully on problem #8. Be sure to enter your answers in the correct format.

Lesson 24 assignment:

- Do not approximate unless the directions say to do so; enter exact answers.
- When graphing piecewise functions in WebAssign, do not start by plotting points. Simply use the graphing tools available (tutorials are available on the graphs before you begin).
- Keep in mind that increasing, decreasing and constant intervals are ALWAYS written in terms of inputs (x -values)
- On problems #4 – 7, it might be helpful to use specific values from each interval first, then use those values to find the general expressions for each interval. Be sure to simplify each expression **completely**.

Lesson 25 assignment:

- Keep in mind that increasing, decreasing and constant intervals are ALWAYS written in terms of inputs (x -values)
- On problems #3 – 5, the axis of the parabola is the axis of symmetry, the line about which the graph is symmetric. Think about what kind of line could be the axis of symmetry for a vertical parabola.
- On problem #8, simplify the equation completely.

Lesson 26 assignment:

- On problem #4, the directions state “the maximum height off the ground is $3a$ feet”, then a value for a is given. Keep in mind that this is not the same as a in $y = a(x - h)^2 + k$.

Lesson 27 assignment:

- Enter answers in factored form whenever possible.

Lesson 28 assignment:

- On problem #7, because there are restrictions, it might be best not to cancel out the common factors.
- On problem #11, in order to solve the inequality $R > S$, a substitution needs to be made (an equivalent expression should be provided for R).

Lesson 29 assignment:

- Only enter restrictions for equations with INFINITELY MANY SOLUTIONS. For rational equations, ALWAYS verify that your solutions do **NOT** produce a zero in the denominator.

Lesson 30 assignment:

- Do not approximate unless the directions say to do so; enter exact answers.
- Decimals are fine as long as they are exact and not approximate.
- There is no need to convert from one unit to another on any variation problems. The constant of proportionality (or constant of variation) contains all necessary units.

Lesson 31 assignment:

- Do not approximate unless the directions say to do so; enter exact answers.

Lesson 32 assignment:

- When solving rational equations, you **MUST** check your answers to verify they do not result in a denominator of zero.