# Cengage Now Hints for Lesson 27 and 28

# In general:

You can visit www.math.purdue.edu/MA 15300

and use the discussion board to post questions and/or read responses. Josh will be live on that board MWF from 6-8 pm all semester. If you post a question at a different time, he will respond as soon as he is able. Do not post after 8:00 pm on a due night and expect an immediate answer. He will not help you as a tutor, but may provide some hints. Please do not expect him to solve things for you.

In general, use Mozilla browser with a PC. Internet Explorer can cause technical issues with Cengage Now problems. We recommend using an ITAP computer or following the configuration instructions on the Cengage Now homepage.

If you log in and see a message that says popups are blocked, enter Cengage Now anyway. That error does not affect your assignments. However, a current version of Java must be installed for Cengage Now to work properly. If the system check detects a Java problem, follow the instructions given to correct that.

You can always view the correct answer to each problem after submitting the assignment. Click on "view assignment details". It will show you what you entered and what the correct answer was. If you log back into the assignment, you will get a different version of the problems that were not correct. Correct problems stay correct and you do not redo them.

# Lesson 27

On all problems, be sure to simplify your answer before entering online.

#3: (d) Math hint: Be careful about parantheses. To simplify  $-(-x^2)^2$ , you would have  $-(x^4)$  or  $-x^4$ .

#7: Math hint: This is an equation to solve. Find the composition first, then set it equal to zero and solve. You can square root both sides (that would be the easiest way to solve it).

#10: Math hint: You must simplify your answer. For example, if your answer is  $r(t) = \sqrt[3]{729t}$ , you must simplify to  $r(t) = 9(\sqrt[3]{t})$ . Enter  $\sqrt[3]{t}$  from the  $\sqrt{x}$  pulldown (on the top row right next to the trash can). There will be a box on the outside of the radical to enter the index and a box under the radical to enter the rest. Do not enter r(t)=.

#11 Math hint: You must simplify the answer similar to what is above. There will be a number that can be taken out from under the radical. Do not include h(t)= with your answer.

### Lesson 28:

#### USE A SIGN CHART FOR THESE PROBLEMS.

- #5 Math hint: Because this is an inequality, you cannot take the square root of both sides and use +/-. One way to handle this problem is to subtract the number to the left side and factor the difference of squares. Then use a sign chart to finish.
- #7 Math hint: Even if you have a common factor to cancel, be sure to include the value that makes it zero in the sign chart. For example, if you have  $\frac{(x+1)(x-2)}{(x+1)(x+3)} \le 0$ , then -

3, -1, and 2 must be included on the top of the sign chart. Then you are welcome to cancel the common x+1 and list only x-2 and x+3 as your factors along the side of the chart to find the resulting sign. Also, for interval notation, we can never divide by zero, so we must always use parantheses with -3 and -1, if necessary. The answer to this example would be  $(-3,-1) \cup (-1,2]$ .

- #8 Same comment as for #7. Remember to always use parantheses for a value that makes the denominator zero.
- #9 Math hint: Move the number on the right to the left side and combine fractions before attempting the sign chart.
- #10 Use interval notation for your answer. When doing the sign chart, time will never be negative. Instead of ranging the sign chart from  $-\infty$  to  $\infty$ , it should range from 0 to  $\infty$
- #11 Math hint: Do not use negative velocities within your sign chart (velocity should only be positive). Your sign chart will start with zero (not including).

Lesson 29 is to be done on paper and pencil from the textbook: The assignment sheet can be found on the MA 153 webpage: www.math.purdue.edu/MA15300