

Week 23 Algebra 2 Assignment:

Day 1: pp. 426-427 #1-5, 7-15, 17, 24-29

Day 2: p. 433 #1-11

Day 3: p. 434 #12-18, 22-28

Day 4: pp. 438-439 #2-30 even

Day 5: Chapter 10 test

Notes on Assignment:

Pages 426-427:

Work to show:

#1-5: Graphs

#7-14: Answer as directed.

#15,17: Graphs

#24-29: Answer as directed.

#1-3: It is easier graphing trig functions if you do not use graph paper, but you can if you want. Put the key points on the graph and sketch.

#4-6: You can do these with a table or you can use what you know about amplitudes to graph them directly.

#9-11: Look at your graphs for #1-3. What x-values do you use? Are there any x-values that you *can't* use?

#12-14: Look at your graphs for #1-3. What y-values do you use for your graphs?

#24-29: A continuous function is one that you can draw without lifting your pencil off the paper.

Pages 433-444:

General notes for this section:

- In the equations $y = a \sin bx$ or $y = a \cos bx$ the period is $\frac{2\pi}{|b|}$ and the amplitude is $|a|$.
- In the equation $y = a \tan bx$ the period is $\frac{\pi}{|b|}$ and there is no amplitude.

To graph trig functions:

1. Decide on the amplitude and mark these numbers on your y-axis.
2. Figure out the period. Mark it off on the x-axis.
3. Split your period in half and then in half again for your key points. Label these values along the x-axis.

Work to show:

#1-5: Graphs

#6-11: Answer as directed.

#8-11: Visualize how high and low these curves will go. What y-values are used?

#12-16: Remember that a negative number in front of the trig function will “flip” it upside-down.

#22: Solve by taking square roots.

#23: You must get the bases the same so that you can set the exponents equal.

#26: Clear the fractions by multiplying by the LCM.

#27: You should know this one from your unit circle.

#28: Use the inverse trig button on your calculator for this one.

Pages 438-439:

Chapter Review – no notes.

Work to show:

#2-4: Show work.

#6-8: Answers only

#10-18: Show work.

#20-24: Show any work needed.

#26-30: Graphs

Chapter 10 test:

You may use a calculator on this test (but not your unit circle).

For the test:

- Name the 6 trig ratios using SOHCAHTOA.
- Solve right triangles using trig.
- Convert radians to degrees and degrees to radians.
- Change decimal degrees into degrees and minutes.
- Give the exact trig values for unit circle angles.
- Graph trig functions.
- Use a calculator to find any of the 6 trig values of angles.
- Solve a trig word problem involving a right triangle