

Graphing Trigonometric functions in Excel/ Trig Table

Directions Trig Table:

1. Open Excel
2. Click on insert
3. Choose Header & Footer
4. Type in the center box "Trigonometric Table"
5. Make this font Bold and underlined
6. In the second line type your name
7. Now Click "Go to Footer"
8. In the center box type "Page " ←make sure you add the space after "page"
9. Now click "page number"
10. Then type " of " ←make sure to put a space before and after "of"
11. Now click "Number of Pages"
12. Now click view
13. Select normal

14. In box A3 type "Angle (degree)"
15. In box B3 type "Angle (radian)"
16. In box C3 type "Sine"
17. In box D3 type "Cosine"
18. In box E3 type "Tangent"
19. Select boxes A3-E3
20. Right click on the selected boxes
21. Choose "Format Cells"

22. In the alignment window under text controls choose wrap text
23. In this same menu also choose Horizontal Alignment Center
24. In the font menu choose bold
25. In the border menu place a border only under the boxes.

26. In box A4 type "0"
27. In box A5 type "1"
28. In box A6 type "2"

29. In B4 type "="
30. Then click on A4
31. Then type "*"
32. Then type "pi()"
33. Then type "/180"
34. Hit enter
35. Click on b4
36. Now right click on the selected box
37. Choose format cell
38. Click on the Number tab
39. Under category choose number
40. On the right choose 4 decimal places

41. In box c4 type "="
42. Now type "sin("
43. Click on box B4
44. Now type ")"
45. Hit Enter.

46. In box D4 type “=”
47. Now type “cos(
48. Click on box B4
49. Now type “)”
50. Hit Enter.

51. In box E4 type “=”
52. Now type “Tan(
53. Click on box B4
54. Now type “)”
55. Hit Enter.
56. Select boxes B4 through E4
57. In the lower right hand corner of the selected window click on the box and drag it down to row 6

58. Now select boxes A4-E6
59. In the lower right hand corner of the selected window click on the box and drag it down until you have 360 values to match the degrees in a circle.

60. SAVE YOUR WORK

Graphing

1. Select columns A and C
2. Click on insert
3. Under charts choose scatter plot
4. Then choose scatter with smooth lines
5. A graph should appear.
6. Place the graph to the right of the data with the top left corner of the graph in the middle of cell F2

7. Select columns A and D
8. Click on insert
9. Under charts choose scatter plot
10. Then choose scatter with smooth lines
11. A graph should appear.
12. Place the graph to the right of the data with the top left 1/2 cell below the bottom left hand corner of the sine graph

13. In column E delete the values for 90°, 180°, 270°, and 360°. This should be boxes E94, E184, E274, and E364

14. Select columns A and E
15. Click on insert
16. Under charts choose scatter plot
17. Then choose scatter with smooth lines
18. A graph should appear.
19. Place the graph to the right of the data with the top left 1/2 cell below the bottom left hand corner of the cosine graph

20. Select columns A, C, D, and E
21. Click on insert
22. Under charts choose scatter plot
23. Then choose scatter with smooth lines

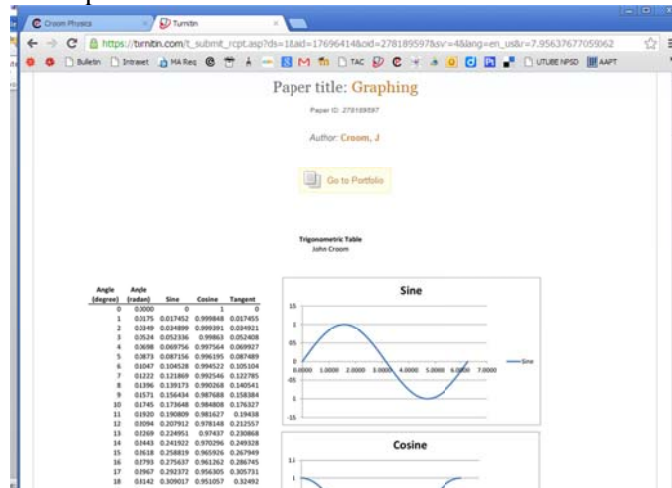
24. A graph should appear.
25. Place the graph to the right of the data with the top left 1/2 cell below the bottom left hand corner of the tangent graph
26. In the window of this graph right click on 40
27. Select format Axis
28. Under Axis Options next to minimum choose fixed and in the box type “-3”
29. Under Axis Options next to maximum choose fixed and in the box type “3”
30. Place the graph to the right of the data with the top left 1/2 cell below the bottom left hand corner of the tangent graph
31. In the window sheet that contains this graph choose change the graph title to “Sine, Cosine, & Tangent Function”
32. SAVE YOUR WORK
33. At the bottom of your Excel window, right click on sheet 2 and select delete
34. At the bottom of your Excel window, right click on sheet 3 and select delete
35. SAVE YOUR WORK

Print Setup

1. In the Views ribbon click "Page Break Preview"
2. Select the cells around all of your data and graphs
3. Right click on the area and choose "Set Print Area"
4. You will see a dotted vertical line separating the pages.
5. Click, hold and drag it to the right of the graphs.
6. You will see a couple of dotted horizontal lines. Move them so none of them cut a graph in half.
7. SAVE YOUR WORK

SUBMITTING ON TURN IT IN

1. To submit this on TurnItIn it needs to be saved as a PDF. If you are using word 2003, you may need to open this up at school to complete the following steps. Word 2007 on, and Open Office both let you save your files as a .pdf
2. Click the file menu
3. Choose “Save As”
4. Under the file name in the window that popped up there is a drop down menu. In this menu, choose .pdf.
5. Save the file as normal
6. Log into TurnItIn
7. Submit your graphs on TurnItIn by uploading the .pdfs like you normally would upload a file. Your final document should look like the picture below.



Name: _____

Mr. Croom's Physics

Date: _____

Chapter 3: Two Dimensional Motion

PRINT (ONLY IF TOLD TO DO SO)

1. Open up the M.S. Office drop down menu
2. Select print
3. Select print again
4. In the print menu make sure you have the correct printer
5. Hit Print
6. Staple your assignment
7. 3 Hole Punch your assignment.
8. Hand in your assignment.

Name: _____

Mr. Croom's Physics

Date: _____

Chapter 3: Two Dimensional Motion

Modified by: Emily Saliba