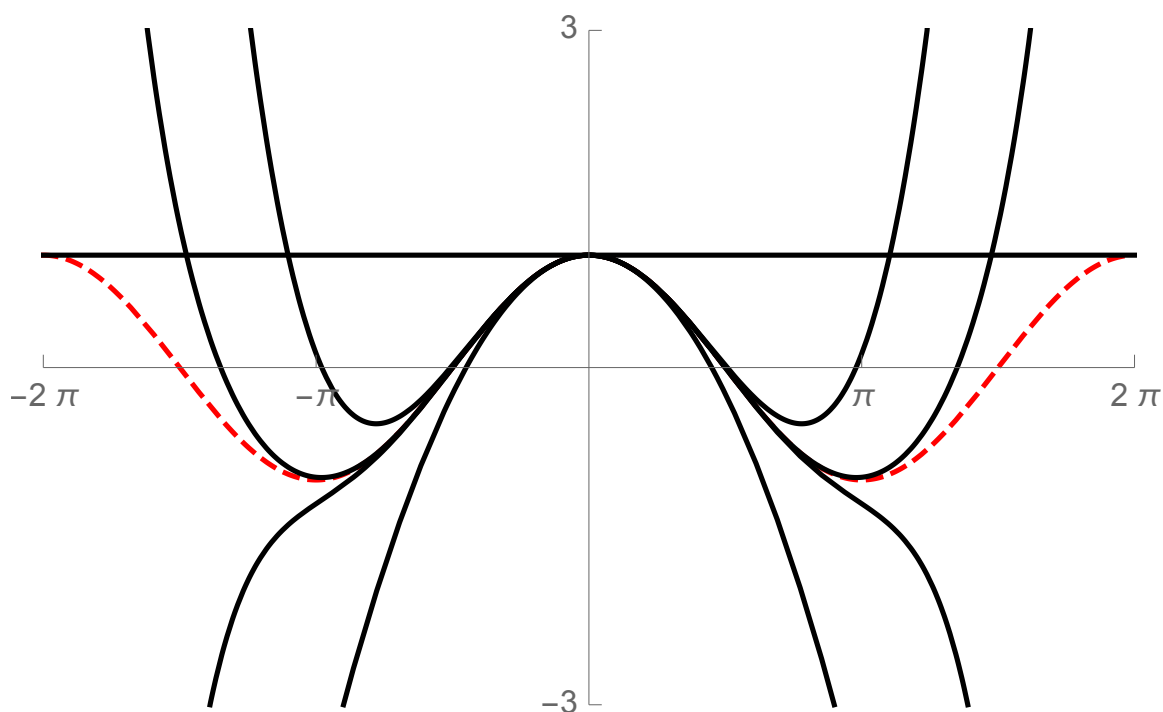


1. Use  $\text{\LaTeX}$  to typeset the contents of these two pages, **including your names on the line above**. Your output should look identical to the content here, including a footnote<sup>1</sup>, a figure generated in *Mathematica*, and a table generated in *Mathematica*. When you submit, combine—in **this order**—your PDF, your  $\text{\LaTeX}$  source, and your *Mathematica* code into a single PDF and upload to Schoology as always.
  - (a) The figure below shows the first five polynomial approximations of  $\cos x$ . Create this exact figure, six inches wide, formatted exactly as shown. Do not type all five functions one at a time; rather, use `Table[]` the way we discussed in class.



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<sup>1</sup>like this!

- (b) The `TableForm[]` shown below is a trig table which shows sine, cosine, and tangent values for integer angles from  $0^\circ$  through  $360^\circ$  in steps of  $10^\circ$ . Like we said in class, we could save the `TableForm[]` as a PDF and import it like we've done before.

angle	sine	cosine	tangent
0	0	1.000	0
10	0.1736	0.9848	0.1763
20	0.3420	0.9397	0.3640
30	0.5000	0.8660	0.5774
40	0.6428	0.7660	0.8391
50	0.7660	0.6428	1.192
60	0.8660	0.5000	1.732
70	0.9397	0.3420	2.747
80	0.9848	0.1736	5.671
90	1.000	0	ComplexInfinity
100	0.9848	-0.1736	-5.671
110	0.9397	-0.3420	-2.747
120	0.8660	-0.5000	-1.732
130	0.7660	-0.6428	-1.192
140	0.6428	-0.7660	-0.8391
150	0.5000	-0.8660	-0.5774
160	0.3420	-0.9397	-0.3640
170	0.1736	-0.9848	-0.1763
180	0	-1.000	0
190	-0.1736	-0.9848	0.1763
200	-0.3420	-0.9397	0.3640
210	-0.5000	-0.8660	0.5774
220	-0.6428	-0.7660	0.8391
230	-0.7660	-0.6428	1.192
240	-0.8660	-0.5000	1.732
250	-0.9397	-0.3420	2.747
260	-0.9848	-0.1736	5.671
270	-1.000	0	ComplexInfinity
280	-0.9848	0.1736	-5.671
290	-0.9397	0.3420	-2.747
300	-0.8660	0.5000	-1.732
310	-0.7660	0.6428	-1.192
320	-0.6428	0.7660	-0.8391
330	-0.5000	0.8660	-0.5774
340	-0.3420	0.9397	-0.3640
350	-0.1736	0.9848	-0.1763
360	0	1.000	0

**Instead**, use *Mathematica* to create a  $\text{\LaTeX}$  array and copy and paste it into your `.tex` document. Then, in  $\text{\LaTeX}$ , add the appropriate formatting.