

No graphing calculators to draw graphs on this problem. When you've finished this problem, hand it in and I'll give you the rest of the test.

1a. On the coordinate systems below, (i) draw **carefully** the graph of $y = \tan x$ for $-\pi/2 \leq x \leq \pi$. Then, (ii) on the same coordinate system, draw an accurate graph of $y = \arctan x$. Tell which graph is which. You must draw any other auxiliary lines and/or asymptotes that are appropriate.

