1. Define a vector $x$ with 100 uniformly sampled values from -4 to 4. On one axes, plot \( \tan(x) \) and \( \cot(x) \) versus $x$. Using handle graphics…
   a. Set the x-axis limits to $-\pi$ to $\pi$.
   b. Set the y-axis limits to -2 to 2.
   c. Set the color of both lines to yellow.
   d. Make one of the lines dashed.
   e. Set the background colors of the figure and axes to be dark green (e.g., $(0,0.3,0)$).
   f. Make the x and y axes white.
   g. Insert a legend for “Tangent” and “Cotangent”.
   h. Make the legend box white.
   i. Using the “textcolor” property of the legend, make the legend text white.

2. Using “mesh”, plot the function
   \[
   f(x, y) = \frac{1}{2\pi} \exp\left\{-\frac{1}{2}(x^2 + y^2)\right\}
   \]
   for 100 uniformly sampled values of $x$ and $y$ over the range -4 to 4. Using handle graphics…
   a. Get the “type” of the mesh object.
   b. Change mesh face coloring to interpolated.
   c. Change the mesh edge coloring to none.
   d. Change the color map to bone (look under figure properties).
   e. Set the background colors of the figure and axes to be dark blue (e.g., $(0,0,0.3)$).
   f. Make all of the axes white.