

## spherical\_surface

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[ ]: import matplotlib.pyplot as plt
import matplotlib.patches as patches

# Step 2: Create a figure and axes
fig, ax = plt.subplots()

# Step 3: Define the arc - center at (0, 0), radius 1, from 0 to 180 degrees
arc = patches.Arc((0, 0), 2, 2, angle=90, theta1=0, theta2=180)

# Step 4: Add the arc to the axes
ax.add_patch(arc)

# Optional: Set the aspect of the plot to equal to make the arc look right
ax.set_aspect('equal')

ax.set_xlim(-5,5)
ax.set_ylim(-2,2)
# Step 5: Show the plot
plt.show()
```