

Math Notes: 3D Graph

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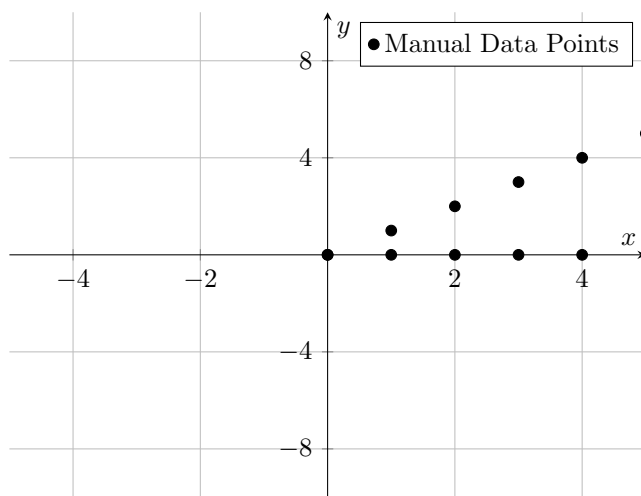
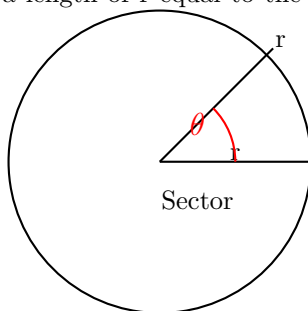


Figure 1: 3D Graph of $z = \sin(x) \cdot \cos(y)$

1 Trig Vocab

Theta: θ represents a angle

Radi: two radii to form a sector and the arc that connects the endpoints of the radii also has a length of r equal to the radii, the angle between the radii



will be one radian

2 Vocab And Formulas

Circumference - The circumference of a circle is the total distance around the edge of the circle. It's like the perimeter of a circle.

Radius - The radius of a circle is the straight-line distance from the center of the circle to any point on its edge.

Converting Degrees to Radians vice versa - $R = (D/180)\pi$, $D = (R/\pi)180$

3 Notes

360 degrees is one revolution and makes a circle

$2\pi \text{ radians} = 360 \text{ degrees}$
 $\pi \text{ radians} = 180 \text{ degrees}$
 $\pi/2 \text{ radians} = 90 \text{ degrees}$
 $\pi/4 \text{ radians} = 45 \text{ degrees}$

4 Equations

Finding Radius - diameter divided by two $\text{radius} = \frac{\text{diameter}}{2}$

5 Practice Problems

Convert angles from Radians to Degrees $4\pi = 240$

Convert angles from Degrees to Radians $315 \text{ degrees} =$