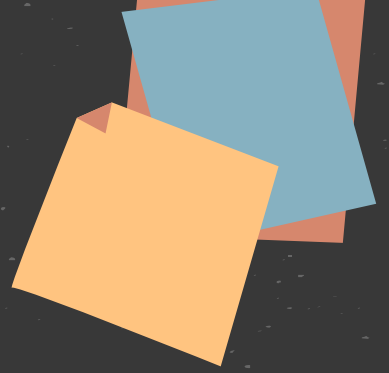
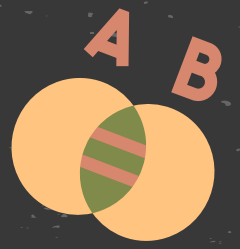
Mathmatical Model

Problem Definition



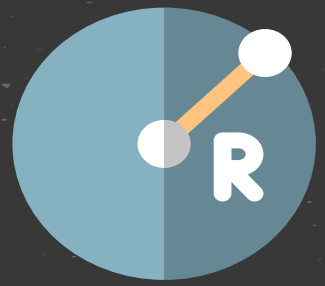
Write mathematical models for the robot arm to evaluate customer service, let identify safe and risk areas and locate sensors to achieve high efficiency and gain in safety.

Variables



the movement of the arm in 3D it will be x, y and z.

Equation & Result



Equation

1/8 ball volume law :

V = (3/4) πr^3

result

the allowed area is :

1/8 * (3/4) π *85^3
= 321555.0975 cm^3.