**Problem**

Suppose you work at a customer service center, and on average, you receive 5 customer complaints per hour. First, determine the probability (%) that you receive exactly 3 complaints in the next hour (i.e., P(X=3)) and calculate the expression: , plus round your answer to the nearest integer.

**Solution**

Given that the average rate () of customer complaints per hour is 5, and we want to find the probability of receiving exactly 3 complaints (k = 3), we can use the Poisson distribution formula:

A graph with a red line

Description automatically generatedSubstituting the given values:

Figure 1. Poisson distribution ( =5)

0.1404 = 14.04%

**Answer: 4**