Problem 1

**Given:**



**Find:**

Confidence level

**Diagram:**

DRAW NORMAL DISTRIBUTION

**Theory:**

Percent area under normal curve given the z score range

**Assumptions:**

Normal distribution

**Solution:**

Used ti 84 calculator

Normalcdf(-1.13, 1.13, 0, 1) = 0.7415 or 74.15% confident

Problem 2

**Given:**

n = 91, average = 216, 95% confidence interval: (210, 222)

**Find:**

* Population standard deviation
* confidence interval if n is doubled

**Diagram:**

**Theory:**

Diagram

Description automatically generated with medium confidence

**Assumptions:**

Stats follow normal curve

**Solution:**

Problem 3

**Given:**

**Find:**

**Diagram:**

**Theory:**

**Assumptions:**

Stats follow normal distribution

Visitors are under 35 years of age

**Solution:**