Day 4: Normal Distribution #1

Objective

In this challenge, we practice solving problems with normally distributed variables.

Task

X is a normally distributed variable with a mean of $\mu = 30$ and a standard deviation of $\sigma = 4$. Find:

- $P(x < 40)$
- $P(x > 21)$
- $P(30 < x < 35)$

Output Format

Your output must be a floating point/decimal number, correct to a scale of 3 decimal places. You can submit solutions in either of the 2 following ways:

1. Solve the problem manually and submit your result as *Plain Text*. In the text box below, enter 3 lines of floating point/decimal numbers.
2. Submit an *R* or *Python* program, which uses the above parameters (hard-coded), and computes the answer.

Your answer should resemble something like:

```
0.123
0.456
0.789
```

(This is **NOT** the answer, just a demonstration of the answering format.)