

DS 1000B Section 003

Corrections: Chapter 3

Corrections

Winter 2026

CORRECTION • Normal Distribution Notation (Slides 12, 13, 17, and all worked examples)

In the Chapter 3 slides, the Normal distribution was written as $N(\mu, \sigma^2)$, where the second parameter is the *variance*. The correct notation for this course is:

$$X \sim N(\mu, \sigma)$$

where the second parameter is the **standard deviation**, not the variance.

What changed: everywhere you see $N(\text{mean}, \text{number})$, the second number is now the standard deviation directly.

Examples of corrected notation:

- Screen time: $N(7, 2.7)$ hours (mean 7 h, SD 2.7 h)
- Testosterone (men): $N(724, 221)$ ng/dL (mean 724, SD 221)
- Caffeine: $N(188, 36)$ mg (mean 188 mg, SD 36 mg)
- Highway speed: $N(117, 8)$ km/h (mean 117, SD 8)
- Standard Normal: $N(0, 1)$ (unchanged, since $SD = 1$)

The formulas for z -scores and all probability calculations remain exactly the same.