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| Task                | Formula                                                            |
|---------------------|--------------------------------------------------------------------|
| z from x            | $z = (x - \mu) / \sigma$                                           |
| x from z            | $x = \mu + z\sigma$                                                |
| Sample z            | $z = (x - \bar{x}) / s$                                            |
| z for a sample mean | $z = (\bar{x} - \mu) / (\sigma / \sqrt{n})$                        |
| 68–95–99.7 rule     | $\pm 1\sigma, \pm 2\sigma, \pm 3\sigma$                            |
| Critical values     | 1.645 (one-tailed 5%), 1.96 (two-tailed 5%), 2.576 (two-tailed 1%) |