CIMT Statistics p182. Example.

$n = 100$

Sample mean, $\bar{x} = 180\text{cm}$

known population variance, $\sigma^2 = 49$

let X = height of man

$E(X) = \mu$

$Var(X) = 49$

by CLT (as n is large), $\bar{X} \sim N\left(\mu, \frac{49}{100}\right)$

so a 95% CI for μ is $\bar{x} \pm z_{0.025}\sqrt{\frac{49}{100}}$

$= 180 \pm 1.95996\sqrt{\frac{49}{100}}$

$= (178.628, 181.372)$

$= (178.6, 181.4)$ to 1dp.

$z_{0.025} = \text{invNorm}(0.975) = 1.95996$

from $180 + \{-1, 1\}\,\text{invNorm}(0.975)\sqrt{\frac{49}{100}}$

check with TI-Nspire
> Menu
> Statistics
> Confidence Intervals
> z Interval
> Data input method: Stats

And read note on p183 that starts "It should be noted..."