

3. (b) $\mu = 70, \sigma = 2$

CALC



$$NCDF(69, E99, 70, \frac{2}{\sqrt{10}}) = .9431$$

BY HAND

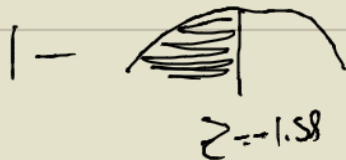
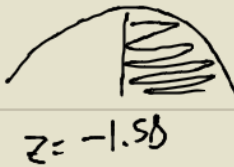
$$Z = \frac{X - \mu_X}{\sigma_X}$$

$$\mu_X = \mu = 70$$

$$\sigma_X = \frac{\sigma}{\sqrt{n}} = \frac{2}{\sqrt{10}} = .632455532$$

$$Z = \frac{(69 - 70)}{.632455532}$$

$$Z = -1.58$$



$$1 - .0571$$

$$.9429$$