

2. (c) $\mu=70$ $\sigma=2$

CALC:



69

$$NCDF(-E99, 69, 70, \frac{2}{\sqrt{15}}) = .0264$$

BY HAND



69

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

$$\mu_X = \mu = 70$$

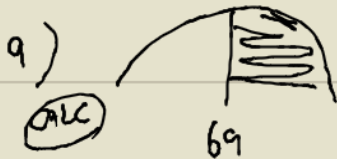
$$\sigma_X = \frac{\sigma}{\sqrt{n}} = \frac{2}{\sqrt{15}} = .5163977795$$

$$Z = \frac{(69 - 70)}{.5163977795}$$

$$Z = -1.94$$

.0262

3. $\mu=70$ $\sigma=2$



CALC

69

$$NCDF(69, E99, 70, 2) = 0.6915$$

BY HAND

$$Z = \frac{X - \mu}{\sigma}$$

$$Z = \frac{69 - 70}{2}$$

$$Z = -\frac{1}{2}$$

$$Z = -0.5$$



z = -0.5



z = -0.50

$$1 - .3085$$

.6915