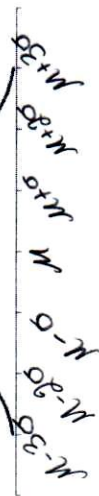


# Ch07 Study Guide Sampling Distributions

## Standard Normal Probabilities with Individual Data Values

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



## Standard Normal Probabilities with Sample Means

$$Z = \frac{\bar{x} - \mu}{\sigma/\sqrt{n}}$$

standard deviation



$$Z = \frac{\text{value} - \text{population value}}{\text{standard deviation}}$$

## Standard Normal Probabilities with Sample Proportions

$$Z = \frac{\bar{p} - p}{\sqrt{p(1-p)/n}}$$

Standard deviation

