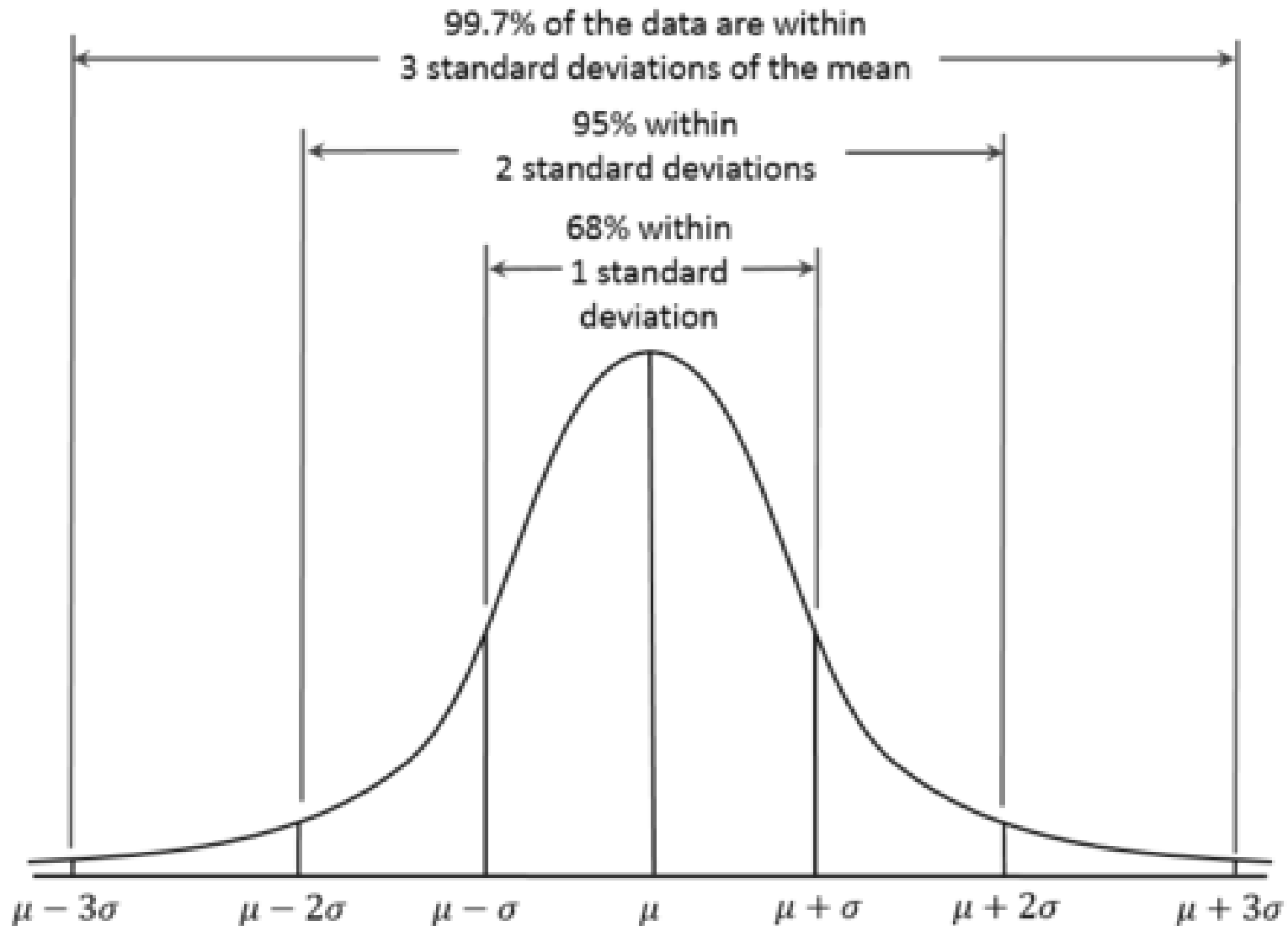


Standard deviation

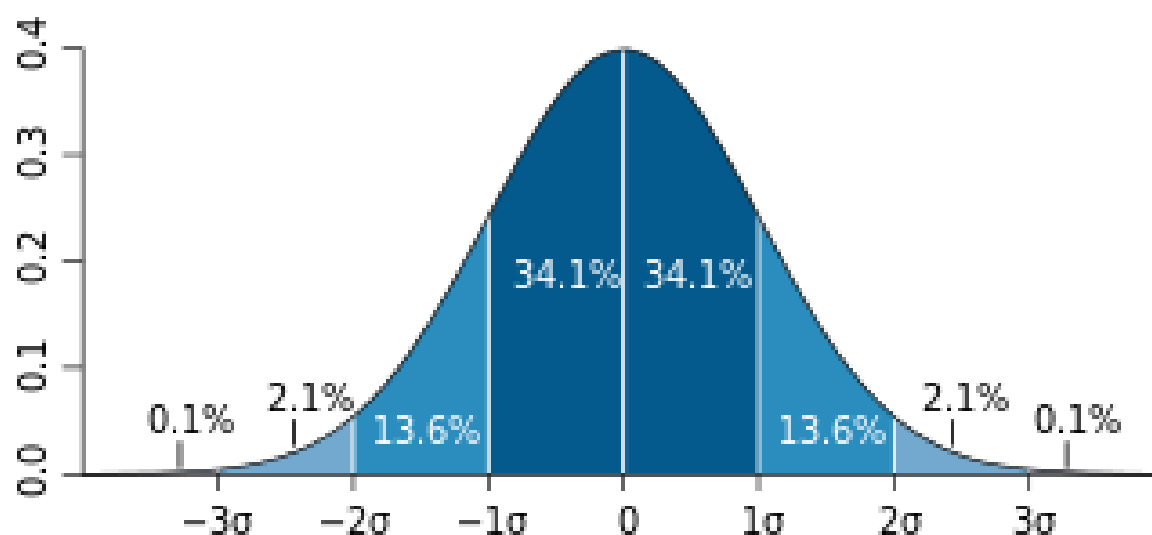


68–95–99.7 rule

$$\Pr(\mu - \sigma \leq X \leq \mu + \sigma) \approx 0.6827$$

$$\Pr(\mu - 2\sigma \leq X \leq \mu + 2\sigma) \approx 0.9545$$

$$\Pr(\mu - 3\sigma \leq X \leq \mu + 3\sigma) \approx 0.9973$$

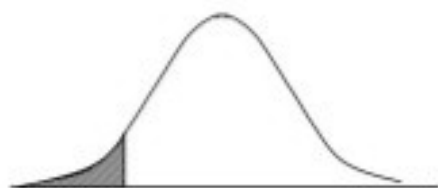


Summary of One- and Two-Tail Tests...

One-Tail Test
(left tail)

$$H_0 : \mu = \mu_0$$

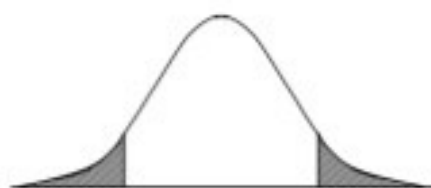
$$H_1 : \mu < \mu_0$$



Two-Tail Test

$$H_0 : \mu = \mu_0$$

$$H_1 : \mu \neq \mu_0$$



One-Tail Test
(right tail)

$$H_0 : \mu = \mu_0$$

$$H_1 : \mu > \mu_0$$

