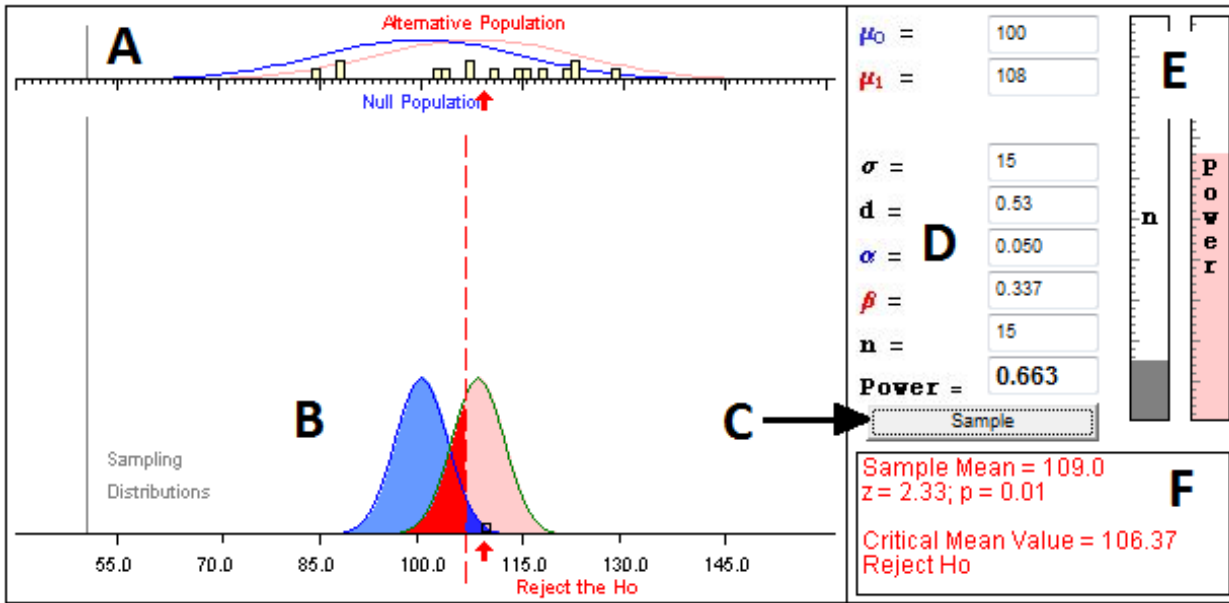


WISE Power Applet

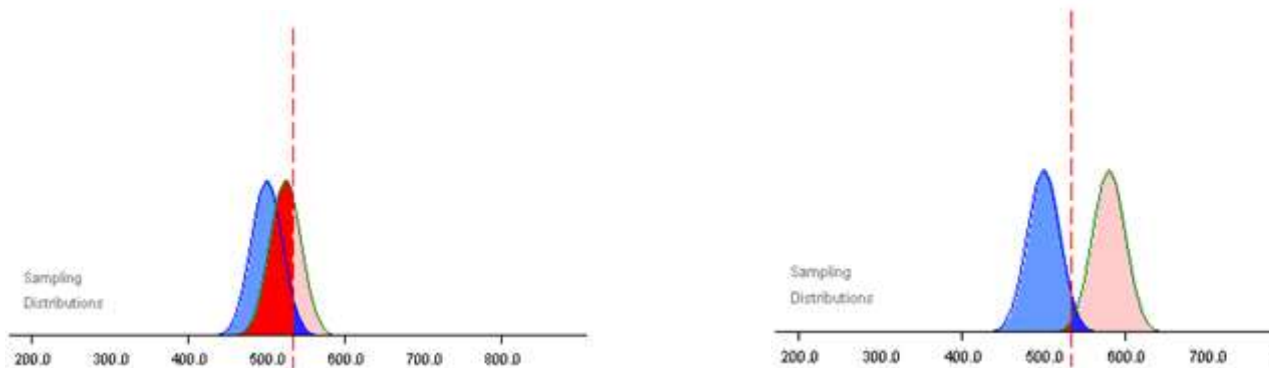
1. As beta value (type II error) increases what happens to your Power?



As beta value (type II error) increases, power... Answer: decreases

2. As Effect Size (difference between means) increases – (keep same Standard Deviations), Power ...?

Think about what happens to the overlap between the two distributions.

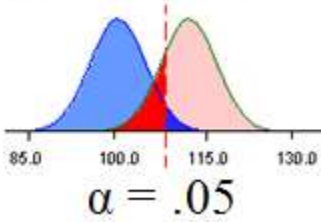


As effect size increases, power... Answer: increases

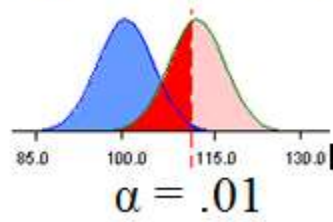
3. If the Alpha level decreases, What happens to the Power...?

Remember if you decrease the power you make it more difficult to reject H_0 when H_a is true.

power = .812



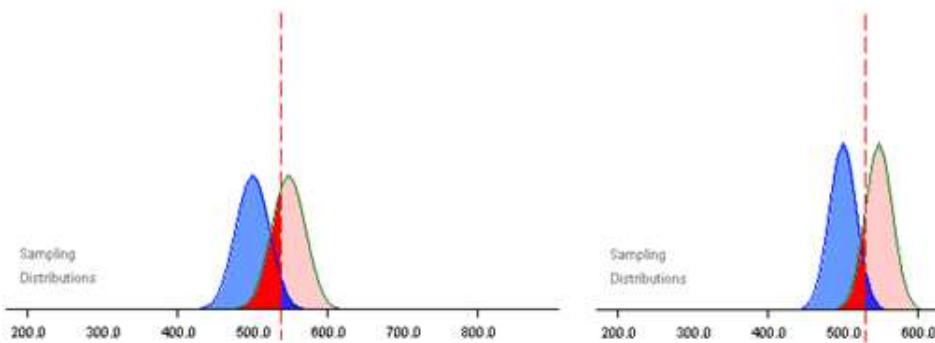
power = .581



As alpha value decreases, power... Answer: decreases

4. Same Mean Difference, Different Standard Deviation

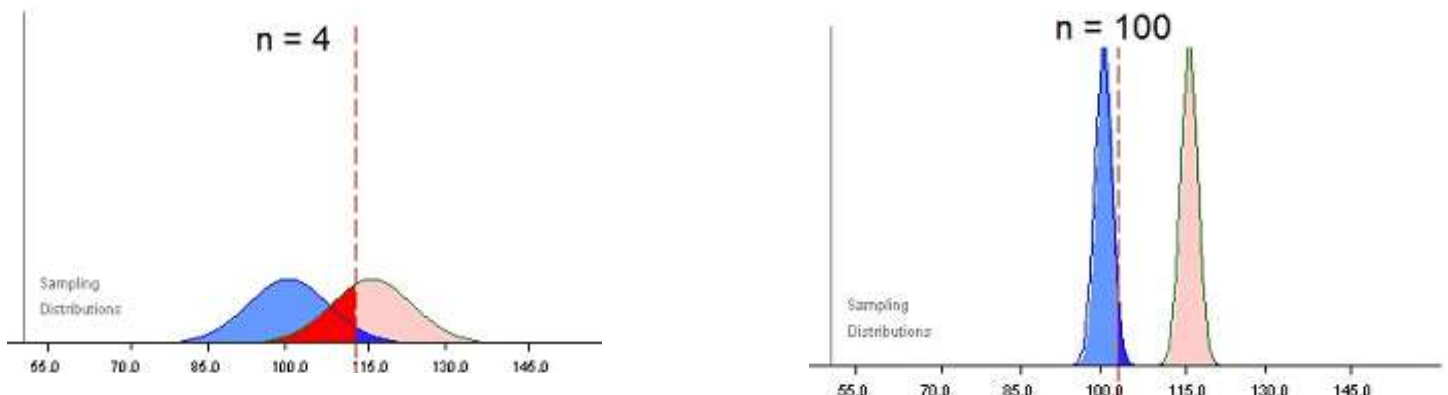
As Standard Deviation decreases what happens to Power?



As standard deviation decreases, power... Answer: increases

5. If n - Sample size increases as all other parameters stay the same what happens to the Power?

Think about what happens to the variability?



as sample size increases, power... Answer: increases