Answer Key pg 401

1. Point estimate **2.** Level of Confidence, $(1 - \alpha)100\%$ **3.** False

4. critical value **7.** 1.645 **8**. 2.575 **9.** 2.33

10. 1.75 **11.** 0.225, 0.024, 270 **12.** 0.0625, 0.0115, 70

13. 0.4855, 0.0235, 816 **14**. 0.862, 0.009, 9251 **15.** $0.146<p<0.254$

16. $0.319 < p < 0.481$ **17.** $0.191 < p < 0.289$ **19.** $0.759 < p < 0.805$

21. c is correct **25a**. 0.150, **b**. $npq \geq 10$ and $n<0.5N$, **c**. $0.140 < p < 0.160$

26a. 0.430 **b**. $npq \geq 10$ and $n<0.5N$ **c**. $0.401 < p < 0.459$

28a. 0.75 **b**. $npq \geq 10$ and $n<0.5N$ **c**. $0.715 < p < 0.785$

d. unlikely **e**. $0.215 < p < 0.285$

29a. 0.54 **b**. $npq \geq 10$ and $n<0.5N$ **c**. $0.520 < p < 0.560$

d. $0.509 < p < 0.571$ **e**. width increases

30a. 0.470 **b**. $npq \geq 10$ and $n<0.5N$ **c**. $0.440 < p < 0.500$

d. $0.430 < p < 0.510$ **e**. width increases

33. 1708, 1842 **37**. 1064, 1068, because you are approximately taking a half of a half when you multiply $\hat{p}$ by $\hat{q}$

39. 984 **40**. 773 **41**. The confidence intervals overlap so it is possible that either Bush or Kerry win