

Ch 18 Confidence Interval Worksheet

1) Your local newspaper polls a random sample of 330 voters, finding 144 who say they will vote “yes” on the upcoming school budget. Create a 95% confidence interval for actual sentiment of all voters.

a) What is given? _____

b) What do we need to find?

c) Confidence Interval: _____

d) Condition check:

Sample size small enough? Explain.

Sample size large enough? Explain.

Success/Failure Condition: _____

e) Parameters of the model

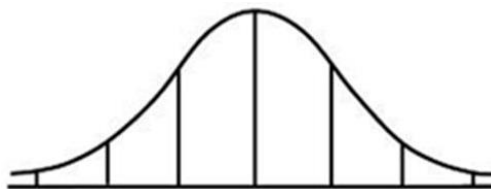
Standard Error: $SE(\hat{p}) =$ _____

$N($ _____, _____ $)$

f) What do we need to show?

g) Critical value: $z^* =$ _____ ME = _____ Interval: _____

h) Draw a sketch and label z scores. Shade in appropriate area.



i) Conclusion in Context:

2) A 2011 Gallup poll found that 76% of Americans believe that high achieving high school students should be recruited to become teachers. This poll was based on a random sample of 1002 Americans.

a) What is given? _____

b) What do we need to find?

c) Confidence Interval: _____

d) Condition check:

Sample size small enough? Explain.

Sample size large enough? Explain.

Success/Failure Condition: _____

e) Parameters of the model

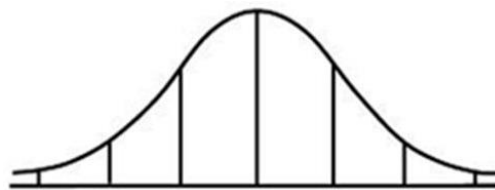
Standard Error: $SE(\hat{p}) =$ _____

$N($ _____, _____ $)$

f) What do we need to show?

g) Critical value: $z^* =$ _____ ME = _____ Interval: _____

h) Draw a sketch and label z scores. Shade in appropriate area.



i) Conclusion in Context:
