

During the previous presidential election year, Media outlets conducted 326 polls. The polls are analyzed by RealClearPolitics.com. The final 9 polls and the RCP's average of the last 7 are summarized below. Use a 95% confidence interval to determine if there is a difference in the proportion of people supporting President Obama in the final 7 presidential polls (RCP average, denoted \bar{p}) and the outcome of the general election (p). The raw data are [here](#).

General Election: Romney vs. Obama

Polling Data						
Poll	Date	Sample	MoE	Obama (D)	Romney (R)	Spread
Final Results	--	--	--	51.1	47.2	Obama +3.9
RCP Average	11/21 - 11/5	--	--	48.8	48.1	Obama +0.7
Politico/GWU/Battleground	11/4 - 11/5	1000 LV	3.1	47	47	Tie
IBD/TIPP	11/3 - 11/5	712 LV	3.7	50	49	Obama +1
Rasmussen Reports	11/3 - 11/5	1500 LV	3.0	48	49	Romney +1
CNN/Opinion Research	11/2 - 11/4	693 LV	3.5	49	49	Tie
Gallup	11/1 - 11/4	2700 LV	2.0	49	50	Romney +1
ABC News/Wash Post	11/1 - 11/4	2345 LV	2.5	50	47	Obama +3
Monmouth/SurveyUSA/Braun	11/1 - 11/4	1417 LV	2.6	48	48	Tie
NBC News/Wall St. Jrnl	11/1 - 11/3	1475 LV	2.6	48	47	Obama +1
Pew Research	10/31 - 11/3	2709 LV	2.2	50	47	Obama +3

All General Election: Romney vs. Obama Polling Data

1. The total number of people surveyed in the final 9 presidential polls equals _____ .

The number of them who support President Obama was equal to _____ .

The proportion of people supporting President Obama in the final 9 presidential polls (\bar{p}) was equal to _____ .

2. The variance of the observations (reported as 1 if yes, otherwise 0) is _____ .

Multiplying \bar{p} by $(1 - \bar{p})$ equals _____ .

The standard error equals _____ .

3. The critical value for a 95% confidence interval equals _____ .

The margin of error equals _____ .

The 95% confidence interval _____ and _____ .

4. Conclusion: