

Stat101 Worksheet
 Confidence Interval for Population Proportion

Name: _____
 Section: _____

| Polling Data | | | | | | |
|-------------------------|----------------------|--------|-------------|-------------|------------|--------------------|
| Poll | Date | Sample | Nussle (R) | Culver (D) | Und. | Spread |
| RCP Average | 10/08 - 10/20 | - | 42.7 | 48.0 | 7.7 | Culver +5.3 |
| Rasmussen | 10/20 - 10/20 | 500 LV | 45 | 49 | 5 | Culver +4.0 |
| Research 2000 | 10/16 - 10/17 | 600 LV | 44 | 49 | 6 | Culver +5.0 |
| Zogby Interactive* | 10/10 - 10/16 | 543 LV | 45 | 48 | 6 | Culver +3.0 |
| Selzer & Co. | 10/08 - 10/11 | 800 LV | 39 | 46 | 12 | Culver +7.0 |
| Rasmussen | 10/05 - 10/05 | 500 LV | 45 | 44 | 8 | Nussle +1.0 |
| Zogby Interactive* | 09/19 - 09/25 | 558 LV | 46 | 46 | 8 | Tie |
| Selzer & Co. | 09/10 - 09/13 | 600 LV | 44 | 44 | 10 | Tie |
| Research 2000 | 09/11 - 09/12 | 600 LV | 43 | 48 | 9 | Culver +5.0 |
| Victory Enterprises (R) | 09/05 - 09/06 | 506 LV | 41 | 38 | 20 | Nussle +3.0 |
| Zogby Interactive* | 08/29 - 09/05 | n/a | 46 | 43 | 11 | Nussle +3.0 |
| Rasmussen | 08/28 - 08/28 | 500 LV | 40 | 42 | 12 | Culver +2.0 |
| Zogby Interactive* | 08/15 - 08/21 | n/a | 45 | 48 | 7 | Culver +3.0 |
| Rasmussen | 07/27 - 07/27 | 500 LV | 38 | 41 | 17 | Culver +3.0 |
| Research 2000 | 05/20 - 05/22 | 600 LV | 41 | 49 | 10 | Culver +8.0 |
| Rasmussen | 04/25 - 04/25 | 500 LV | 40 | 46 | 11 | Culver +6.0 |
| Rasmussen | 03/29 - 03/29 | 500 LV | 38 | 40 | 16 | Culver +2.0 |
| Research 2000 | 03/20 - 03/22 | 600 LV | 43 | 44 | 13 | Culver +1.0 |
| Rasmussen | 02/07 - 02/07 | 500 LV | 40 | 41 | 12 | Culver +1.0 |
| Rasmussen | 01/09 - 01/09 | 500 LV | 40 | 40 | 13 | Tie |
| Rasmussen | 11/28 - 11/28 | 500 LV | 38 | 41 | 14 | Culver +3.0 |
| Research 2000 | 11/14 - 11/16 | 600 LV | 42 | 38 | 20 | Nussle +4.0 |
| Research 2000 | 05/02 - 05/04 | 600 LV | 41 | 35 | 24 | Nussle +6.0 |

The Selzer & Co is the Des Moines Register poll conducted Oct 8-11 where we calculated a 95% confidence interval for voters in favor of Culver to be (42.6%, 49.5%).

1. Compute the 95 % confidence intervals for Culver votes in the Rasmussen 10/20, Research 2000 10/16-17 and Zogby Interactive 10/10-16 poll results.
2. Plot all of the intervals as line plots, showing the relative overlap and disparity between polls.
3. Explain why there is a difference in the confidence intervals produced from the polls of the different organizations.