

8.1.D1 ~ Representing Data

Construct a dot plot for each data set. Then, describe the data distribution - symmetric, skewed right, or skewed left - and interpret its meaning in terms of the problem situation. (If necessary, refer to the 8.1 example "Representing & Interpreting Data Displayed on Dot Plots" in the Chapter 8 Summary.)

1) Sales Tax

State	Percent	State	Percent	State	Percent	State	Percent
South Dakota	4	Indiana	7	Nebraska	6	New Mexico	5
Alabama	4	Idaho	6	New Jersey	7	New Hampshire	0
Mississippi	7	Ohio	6	Illinois	6	Pennsylvania	6
Oregon	0	Delaware	0	South Carolina	6	Massachusetts	6

2) Birth Rate

Country	Births/woman	Country	Births/woman	Country	Births/woman
Ecuador	2	Mali	6	Sierra Leone	5
Equatorial Guinea	5	Qatar	2	Azerbaijan	2
Japan	1	Nepal	2	Sweden	2
Cook Islands	2	Costa Rica	2	Ireland	2
Thailand	2	Egypt	3	Tonga	3
Belize	3	Andorra	1		

Construct a box-and-whisker plot for each data set. Then, describe the data distribution - symmetric, skewed right, or skewed left - and interpret its meaning in terms of the problem situation. (If necessary, refer to the 8.1 example "Representing & Interpreting Data Displayed on Box-and-Whisker Plots" in the Chapter 8 Summary.)

3) Average Time to Maturity

Plant	Days
Jersey Tomato	74
Scallion	120
Red Onion	95
Soy Bean	70
Zucchini	50
Lima Bean	75
Corn (Silver Queen)	92
Red Lettuce	50
Kale	60

4) Age Assumed Office

Senator	Age	Senator	Age
Bob Corker	54	John Thune	43
Ben Cardin	63	Jeff Sessions	50
Ron Wyden	46	Debbie Stabenow	50
Tim Johnson	50	Jeff Merkley	52
Ted Cruz	42	Mazie Hirono	65

Construct a histogram for each data set. Then, describe the data distribution - symmetric, skewed right, or skewed left - and interpret its meaning in terms of the problem situation. (If necessary, refer to the 8.1 example "Representing & Interpreting Data Displayed Histograms" in the Chapter 8 Summary.)

5) Life Expectancy

State	Years
Maine	79.1
Wisconsin	79.8
North Dakota	80.2
Florida	81.7
District of Columbia	77.9
Indiana	81.3
Idaho	81.4
California	80.9
Colorado	80.9

6) Birth Rate

Country	Births/woman
Mexico	2.29
Malta	1.54
Philippines	3.06
Singapore	0.8
Jamaica	2.05
Norway	1.86
Slovakia	1.39
Vanuatu	3.36
Latvia	1.35

Solve the quadratic equation using ANY algebraic method: factoring, square roots, completing the square, or the quadratic formula. If necessary, approximate your solutions to the nearest hundredth.

7) $2v^2 - 3v - 31 = 4$

8) $3n^2 - 12n - 30 = -11$

9) $x^2 + 6x - 48 = 3$

10) $5n^2 + 33n + 11 = -7$