

HW55 Visualizing Statistics

Draw a dot plot for each data set.

1) **Educational Attainment by US State**

State	% Bachelor's Degree
New Jersey	35
Montana	27
Delaware	29
Indiana	23
Hawaii	30
Oklahoma	23

State	% Bachelor's Degree
Alaska	27
Maine	27
South Carolina	24
New Hampshire	32
Kansas	30

State	% Bachelor's Degree
District of Columbia	49
Colorado	36
Virginia	34
Vermont	33
Arkansas	19

2) **Sales Tax**

State	Percent
Texas	6
Connecticut	6
Arizona	6
Tennessee	7
Maryland	6

State	Percent
Rhode Island	7
Nebraska	6
New York	4
Maine	6

State	Percent
North Carolina	5
California	8
Oklahoma	5
Florida	6

State	Percent
North Dakota	5
Idaho	6
District of Columbia	6
Michigan	6

3) **Shoe Size**

9 11 6 10 10 9 6 6
 9 6 7 10 7 6 8 9

4) **Academy Awards**

Movie	# Awards
Gigi	9
All the King's Men	3
Titanic	11
The Sting	7
Wings	2
Slumdog Millionaire	8
On the Waterfront	8
The Departed	4

Movie	# Awards
Lord of the Rings: Return of the King	11
All Quiet on the Western Front	2
Chicago	6
Out of Africa	7
The English Patient	9
Shakespeare in Love	7
Ben-Hur	11
The Bridge on the River Kwai	7

5) **Birth Rate**

Country	Births/woman
Brunei	2
Angola	5
Sri Lanka	2
Bahrain	2
Bulgaria	1
United States	2

Country	Births/woman
Qatar	2
Cambodia	3
Syria	3
Nepal	2
Slovakia	1

Country	Births/woman
Eritrea	4
Liechtenstein	2
Namibia	2
Antigua & Barbuda	2
Vanuatu	3

6) Games per World Series

4 7 7 7 6 7 5 4
4 5 6 4 7 5 5

Draw a histogram for each data set.

7) Monthly Revenue

43,650 28,090 35,500 28,900
22,430 55,220 11,970 40,430
11,510 38,230 18,540 44,950
30,440 29,600 37,780 25,470

8) 2012 Summer Olympics

Country	Medals	Country	Medals
Azerbaijan	10	Italy	28
Mexico	7	Ireland	5
Colombia	8	Ethiopia	7
Sweden	8	Germany	44
Kenya	11	China	88
France	34	South Africa	6
Iran	12	North Korea	6
Slovenia	4	Croatia	6
Australia	35		

9) Shoe Size

8 8 7 9 8 11 8.5
13 8.5 9 9 7 8.5 10
7.5

10) Car Weights (kg)

1,565 1,400 1,135 1,660 1,805
1,530 1,580 1,645 1,715 1,730
1,030 1,770 1,460 1,660 1,535
1,615

11) Boiling Point

Substance	°C	Substance	°C
Platinum	3,825	Sea Water	100.7
Calcium	1,484	Magnesium	1,091
Iron	2,862	Methanol	64.7
Silicon	2,357	Sodium	882.8
Nitric Acid	83	Chloroform	61.2
Gold	2,856	Mercury	356.7
Radium	1,140	Sulphur	444.7
Zinc	907	Sulphuric Acid	337

12) # Words in Book Titles

2 5 2 2 4 1 6 1
2 5 4 1 2 3 2 2

Draw a box-and-whisker plot for each data set.

13) Hits in a Round of Hacky Sack

8 8 8 9 8 15 18
17 13 13 12 8 6 19
5 15

14) Mens Heights (Inches)

74 69 70 74 71 67 62
69 69 73 72 64 69 72
68

15) Campers at National Parks

Park	Tent Campers
Buffalo River	19,093
Bryce Canyon	35,979
Badlands	8,873
Wind Cave	5,600
Klondike Gold Rush	1,781
Natchez Trace Parkway	5,187
Grand Teton	10
Isle Royale	5,028

Park	Tent Campers
Great Basin	19,667
Cumberland Gap	2,641
Guadalupe Mountains	7,800
Cumberland Island	12,066
Everglades	8,698
Indiana Dunes	13,380
Black Canyon of the Gunnison	9,481

16) Car Weights (kg)

1,440 1,015 1,315 1,195 1,400
 1,520 1,660 1,235 1,100 1,670
 1,640 1,640 1,130 1,895 1,705
 1,075 1,335

17) Test Scores

58 36 36 51 42 49 40
 46 40 55 31 55 53 41
 53 45

18) Single Family Home Prices

142,200 155,500 150,500 169,300
 178,500 173,200 186,900 166,600
 180,800 158,100 148,400 150,600
 163,400 164,200 169,900

Solve each equation for the indicated variable.

19) $m - a = p + n$, for a

20) $u = b + \frac{k}{a}$, for a

Solve each system by graphing.

21) $y = -8x - 4$
 $y = -8x + 1$

Solve each system by elimination.

22) $3x + 4y = 18$
 $-3x - 2y = -18$

23) $-5x + 6y = -22$
 $-5x + 6y = -18$

24) $-x - 16y = -18$
 $-6x + 8y = -4$

Solve each system by substitution.

25) $2x + y = -8$
 $-8x - 8y = 16$