

Statistics 2.3

Algebra 2

Calculate the mean, standard deviation, and variance for 1 and 2 using your calculator.

1)

Musicals	Years since play's debut in the U.S.
My Fair Lady	52
Aida	10
Phantom of the Opera	22
Wicked	5
Rent	12
Peter Pan	23
Mamma Mia	9
Beauty and the Beast	14
Les Miserables	28
Cats	26
Sound of Music	49
Music Man	51
Fiddler on the roof	44
Mary Poppins	4
West Side Story	51

Calculate the following probabilities in fraction, decimal, and percentage form.

A booster club releases balloons when their team gets its first score of the game. There are 40 blue balloons, 50 red, 20 black, and 30 white.

- 3) What is the probability the first balloon to fall to the ground is blue?
- 4) What is the prob. the first to fall is red or black?
- 5) What is the prob. the last balloon to fall is not red?
- 6) What is the prob. the last to fall is not blue, red, or black?

In a parking lot 41% of the cars are domestic, 31% are Japanese, 19% are European, and the rest are Korean.

7) What is the probability a car stolen randomly from the lot is domestic or European?

8) What is the probability a car stolen is not Asian?

2)

Average SLC Temperatures		
Month	High (F°)	Low (F°)
January	37	21
February	43	26
March	53	33
April	61	39
May	71	47
June	82	56
July	91	63
August	89	62
September	78	52
October	64	41
November	49	30
December	38	22

Find the range and interquartile range for the data below.

9) People at a party ate the number of slices of pizza indicated in the list:

2, 5, 3, 2, 1, 7, 8

10) John kept track of the number of miles he put on his car while traveling for business on ten consecutive days.

53, 88, 144, 97, 10, 12, 293, 167, 71, 15