

Statistics: Chapter 4 Review

1. No. One of the probabilities is less than zero
2. No, the sum of the probabilities is .85, which is not equal to 1.
3.

a	X=amount won	0	5	10
	P(X)	1/2	1/4	1/4

 - b. \$3.75
 - c. \$4.15
4.

a.	X= profit	100	-9900	-4900
	P(X)	.997	.001	.002

 - b. \$80
 - c. \$386.80
5.

a.	Yes	b.	No	c.	Yes	d.	No
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6.
 - a. .000179
 - b. .999
 - c. 1
 - d. .0979
 - e. .000819
7.

a.	.0576	b.	.136	c.	.942	d.	.194
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8.
 - a. Yes
 - b. 2, 1.3
 - c. yes. Usual values are between -.6 and 4.6. 7 is not between these values
 - d. .0328
 - e. .121
 - f. .0000737
9.
 - a. Yes
 - b. 10, 3
 - c. Yes; Usual values are between 4 and 16. 25 is more than 16
 - d. no; 15 is between the usual values of 4 and 16
10.
 - a. 170, 10.6
 - b. 210 Yes; Usual values are between 148.8 and 191.2 210 is higher than 191.2
 - c. Since there seems to be a higher incident of accidents in New York City when compared with the the statistic of 34%. You would expect to have between 148.8 and 191.2 if the actual accident rate was actually 34%.