

Question #65389, Math / Statistics and Probability

Find the variance and the standard deviation of the sum obtained in tossing a pair of fair dice.

Answer.

x	P(x)
2	1/36
3	2/36
4	3/36
5	4/36
6	5/36
7	6/36
8	5/36
9	4/36
10	3/36
11	2/36
12	1/36

$$\mu = \sum xp(x) = 7$$

$$\sigma = \sqrt{\sum x^2p(x) - \mu^2} = \sqrt{\frac{35}{6}} \approx 2.4152.$$