Expected Value & Binomial Probability · 1

The table shows the probability distribution of X. Find the expected value E(X).

x	2	7	8
P(x)	0.3	0.1	0.6

Expected Value & Binomial Probability · 2

A game costs nothing to enter. You win $22 with probability $\frac{1}{6}$; otherwise you lose $2. What is the expected value of the game in dollars? (Use a negative number for an expected loss.)

Expected Value & Binomial Probability · 3

A fair coin is tossed 3 times. What is the probability of getting exactly 3 heads? (fraction)

Expected Value & Binomial Probability · 4

A basketball player makes 10% of free throws. In 200 attempts, what is the expected (mean) number of made shots?

Expected Value & Binomial Probability · 5

A basketball player makes 80% of free throws. In 120 attempts, what is the expected (mean) number of made shots?

Expected Value & Binomial Probability · 6

A basketball player makes 50% of free throws. In 60 attempts, what is the expected (mean) number of made shots?

Expected Value & Binomial Probability · 7

A basketball player makes 25% of free throws. In 200 attempts, what is the expected (mean) number of made shots?

Expected Value & Binomial Probability · 8

A fair coin is tossed 3 times. What is the probability of getting exactly 2 heads? (fraction)

Expected Value & Binomial Probability · 2

ANSWER

2

Expected Value & Binomial Probability · 1

ANSWER

6.1

Expected Value & Binomial Probability · 4

ANSWER

20

Expected Value & Binomial Probability · 3

ANSWER

$$\frac{1}{8}$$

Expected Value & Binomial Probability · 6

ANSWER

30

Expected Value & Binomial Probability · 5

ANSWER

96

Expected Value & Binomial Probability · 8

ANSWER

$$\frac{3}{8}$$

Expected Value & Binomial Probability · 7

ANSWER

50

The table shows the probability distribution of X. Find the expected value E(X).

x	0	2	10
P(x)	0.2	0.4	0.4

A game costs nothing to enter. You win $12 with probability $\frac{1}{4}$; otherwise you lose $4. What is the expected value of the game in dollars? (Use a negative number for an expected loss.)

A fair coin is tossed 5 times. What is the probability of getting exactly 5 heads? (fraction)

A basketball player makes 40% of free throws. In 180 attempts, what is the expected (mean) number of made shots?

The table shows the probability distribution of X. Find the expected value E(X).

x	0	3	8
P(x)	0.1	0.3	0.6

A game costs nothing to enter. You win $38 with probability $\frac{1}{2}$; otherwise you lose $4. What is the expected value of the game in dollars? (Use a negative number for an expected loss.)

A basketball player makes 60% of free throws. In 160 attempts, what is the expected (mean) number of made shots?

A fair coin is tossed 3 times. What is the probability of getting exactly 1 heads? (fraction)

Expected Value & Binomial Probability · 10

ANSWER

0

Expected Value & Binomial Probability · 9

ANSWER

4.8

Expected Value & Binomial Probability · 12

ANSWER

72

Expected Value & Binomial Probability · 11

ANSWER

$$\frac{1}{32}$$

Expected Value & Binomial Probability · 14

ANSWER

17

Expected Value & Binomial Probability · 13

ANSWER

5.7

Expected Value & Binomial Probability · 16

ANSWER

$$\frac{3}{8}$$

Expected Value & Binomial Probability · 15

ANSWER

96

Expected Value & Binomial Probability · 17

The table shows the probability distribution of X. Find the expected value E(X).

x	0	8	9
P(x)	0.3	0.4	0.3

Expected Value & Binomial Probability · 18

A game costs nothing to enter. You win $23 with probability $\frac{1}{5}$; otherwise you lose $2. What is the expected value of the game in dollars? (Use a negative number for an expected loss.)

Expected Value & Binomial Probability · 19

A fair coin is tossed 4 times. What is the probability of getting exactly 4 heads? (fraction)

Expected Value & Binomial Probability · 20

A fair die is rolled 3 times. What is the probability of rolling a 4 exactly 2 times? (fraction)

Expected Value & Binomial Probability · 21

A basketball player makes 60% of free throws. In 20 attempts, what is the expected (mean) number of made shots?

Expected Value & Binomial Probability · 22

A fair coin is tossed 6 times. What is the probability of getting exactly 4 heads? (fraction)

Expected Value & Binomial Probability · 23

A fair die is rolled 4 times. What is the probability of rolling a 2 exactly 3 times? (fraction)

Expected Value & Binomial Probability · 24

A fair die is rolled 3 times. What is the probability of rolling a 1 exactly 2 times? (fraction)

Expected Value & Binomial Probability · 18

ANSWER

3

Expected Value & Binomial Probability · 17

ANSWER

5.9

Expected Value & Binomial Probability · 20

ANSWER

$$\frac{5}{72}$$

Expected Value & Binomial Probability · 19

ANSWER

$$\frac{1}{16}$$

Expected Value & Binomial Probability · 22

ANSWER

$$\frac{15}{64}$$

Expected Value & Binomial Probability · 21

ANSWER

12

Expected Value & Binomial Probability · 24

ANSWER

$$\frac{5}{72}$$

Expected Value & Binomial Probability · 23

ANSWER

$$\frac{5}{324}$$