Expected Value & Binomial Probability · 1

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

| x | -4 | 5 | 7 | 9 |
|---|---|---|---|---|
| P(x) | 0.3 | 0.3 | 0.3 | 0.1 |

Expected Value & Binomial Probability · 2

A game costs nothing to enter. You win \$5 with probability $\frac{1}{4}$; otherwise you lose \$3. 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 die is rolled 4 times. What is the probability of rolling a 1 exactly 3 times? (fraction)

Expected Value & Binomial Probability · 4

30% of the parts from a machine are defective. In a random sample of 5 parts, what is the probability that exactly 4 are defective? Round to the nearest thousandth.

Expected Value & Binomial Probability · 5

A fair coin is tossed 5 times. What is the probability of getting exactly 1 heads? (fraction)

Expected Value & Binomial Probability · 6

10% of the parts from a machine are defective. In a random sample of 8 parts, what is the probability that exactly 3 are defective? Round to the nearest thousandth.

Expected Value & Binomial Probability · 7

A fair coin is tossed 5 times. What is the probability of getting exactly 3 heads? (fraction)

Expected Value & Binomial Probability · 8

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

Expected Value & Binomial Probability · 2

**ANSWER**

**-1**

Expected Value & Binomial Probability · 1

**ANSWER**

**3.3**

Expected Value & Binomial Probability · 4

**ANSWER**

**0.028**

Expected Value & Binomial Probability · 3

**ANSWER**

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

Expected Value & Binomial Probability · 6

**ANSWER**

**0.033**

Expected Value & Binomial Probability · 5

**ANSWER**

$$\frac{5}{32}$$

Expected Value & Binomial Probability · 8

**ANSWER**

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

Expected Value & Binomial Probability · 7

**ANSWER**

$$\frac{5}{16}$$

Expected Value & Binomial Probability · 9

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

| x | -3 | -2 | 8 | 10 |
|---|---|---|---|---|
| P(x) | 0.3 | 0.2 | 0.3 | 0.2 |

Expected Value & Binomial Probability · 10

A game costs nothing to enter. You win $43 with probability $\frac{1}{4}$; otherwise you lose $5. What is the expected value of the game in dollars? (Use a negative number for an expected loss.)

Expected Value & Binomial Probability · 11

A fair die is rolled 2 times. What is the probability of rolling a 6 exactly 1 time? (fraction)

Expected Value & Binomial Probability · 12

60% of the parts from a machine are defective. In a random sample of 7 parts, what is the probability that exactly 1 is defective? Round to the nearest thousandth.

Expected Value & Binomial Probability · 13

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

Expected Value & Binomial Probability · 14

80% of the parts from a machine are defective. In a random sample of 6 parts, what is the probability that exactly 2 are defective? Round to the nearest thousandth.

Expected Value & Binomial Probability · 15

A fair coin is tossed 8 times. What is the probability of getting exactly 5 heads? (fraction)

Expected Value & Binomial Probability · 16

90% of the parts from a machine are defective. In a random sample of 6 parts, what is the probability that exactly 3 are defective? Round to the nearest thousandth.

Expected Value & Binomial Probability · 10

**ANSWER**

**7**

Expected Value & Binomial Probability · 9

**ANSWER**

**3.1**

Expected Value & Binomial Probability · 12

**ANSWER**

**0.017**

Expected Value & Binomial Probability · 11

**ANSWER**

$$\frac{5}{18}$$

Expected Value & Binomial Probability · 14

**ANSWER**

**0.015**

Expected Value & Binomial Probability · 13

**ANSWER**

$$\frac{1}{64}$$

Expected Value & Binomial Probability · 16

**ANSWER**

**0.015**

Expected Value & Binomial Probability · 15

**ANSWER**

$$\frac{7}{32}$$

Expected Value & Binomial Probability · 17

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

| x | -3 | -1 | 4 | 5 |
|---|---|---|---|---|
| P(x) | 0.1 | 0.3 | 0.4 | 0.2 |

Expected Value & Binomial Probability · 18

A game costs nothing to enter. You win $57 with probability $\frac{1}{6}$; otherwise you lose $3. 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 die is rolled 2 times. What is the probability of rolling a 2 exactly 1 time? (fraction)

Expected Value & Binomial Probability · 20

40% of the parts from a machine are defective. In a random sample of 4 parts, what is the probability that exactly 2 are defective? Round to the nearest thousandth.

Expected Value & Binomial Probability · 21

A fair coin is tossed 6 times. What is the probability of getting exactly 0 heads? (fraction)

Expected Value & Binomial Probability · 22

60% of the parts from a machine are defective. In a random sample of 5 parts, what is the probability that exactly 4 are defective? Round to the nearest thousandth.

Expected Value & Binomial Probability · 23

20% of the parts from a machine are defective. In a random sample of 6 parts, what is the probability that exactly 2 are defective? Round to the nearest thousandth.

Expected Value & Binomial Probability · 24

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

| x | -5 | -4 | 7 | 10 |
|---|---|---|---|---|
| P(x) | 0.3 | 0.1 | 0.1 | 0.5 |

Expected Value & Binomial Probability · 18

**ANSWER**

**7**

Expected Value & Binomial Probability · 17

**ANSWER**

**2**

Expected Value & Binomial Probability · 20

**ANSWER**

**0.346**

Expected Value & Binomial Probability · 19

**ANSWER**

$$\frac{5}{18}$$

Expected Value & Binomial Probability · 22

**ANSWER**

**0.259**

Expected Value & Binomial Probability · 21

**ANSWER**

$$\frac{1}{64}$$

Expected Value & Binomial Probability · 24

**ANSWER**

**3.8**

Expected Value & Binomial Probability · 23

**ANSWER**

**0.246**