Task card 1 Expected Value & Binomial Probabil...

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

Task card 2 Expected Value & Binomial Probabil...

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.)

Task card 3 Expected Value & Binomial Probabil...

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

Task card 4 Expected Value & Binomial Probabil...

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

Task card 5 Expected Value & Binomial Probabil...

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

Task card 6 Expected Value & Binomial Probabil...

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

Task card 7 Expected Value & Binomial Probabil...

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

Task card 8 Expected Value & Binomial Probabil...

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

Task card 9 Expected Value & Binomial Probabil...

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

Task card 10 Expected Value & Binomial Probabil...

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.)

Task card 11 Expected Value & Binomial Probabil...

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

Task card 12 Expected Value & Binomial Probabil...

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

Task card 13 Expected Value & Binomial Probabil...

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

Task card 14 Expected Value & Binomial Probabil...

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.)

Task card 15 Expected Value & Binomial Probabil...

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

Task card 16 Expected Value & Binomial Probabil...

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

Task card 17 Expected Value & Binomial Probabil...

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

Task card 18 Expected Value & Binomial Probabil...

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.)

Task card 19 Expected Value & Binomial Probabil...

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

Task card 20 Expected Value & Binomial Probabil...

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

Task card 21 Expected Value & Binomial Probabil...

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

Task card 22 Expected Value & Binomial Probabil...

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

Task card 23 Expected Value & Binomial Probabil...

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

Task card 24 Expected Value & Binomial Probabil...

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

Expected Value & Binomial Probability Task Cards

Recording sheet · Grade 12 · Solve each problem. Give probabilities as fractions in simplest form or as decimals rounded the way the problem says.

Scan to check your answers

Name: _____ Date: _____

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24

Expected Value & Binomial Probability Task Cards: Answer Key

Grade 12 · Easy

The answers online

1. 6.1	**2.** 2	**3.** $\frac{1}{8}$
4. 20	**5.** 96	**6.** 30
7. 50	**8.** $\frac{3}{8}$	**9.** 4.8
10. 0	**11.** $\frac{1}{32}$	**12.** 72
13. 5.7	**14.** 17	**15.** 96
16. $\frac{3}{8}$	**17.** 5.9	**18.** 3
19. $\frac{1}{16}$	**20.** $\frac{5}{72}$	**21.** 12
22. $\frac{15}{64}$	**23.** $\frac{5}{324}$	**24.** $\frac{5}{72}$