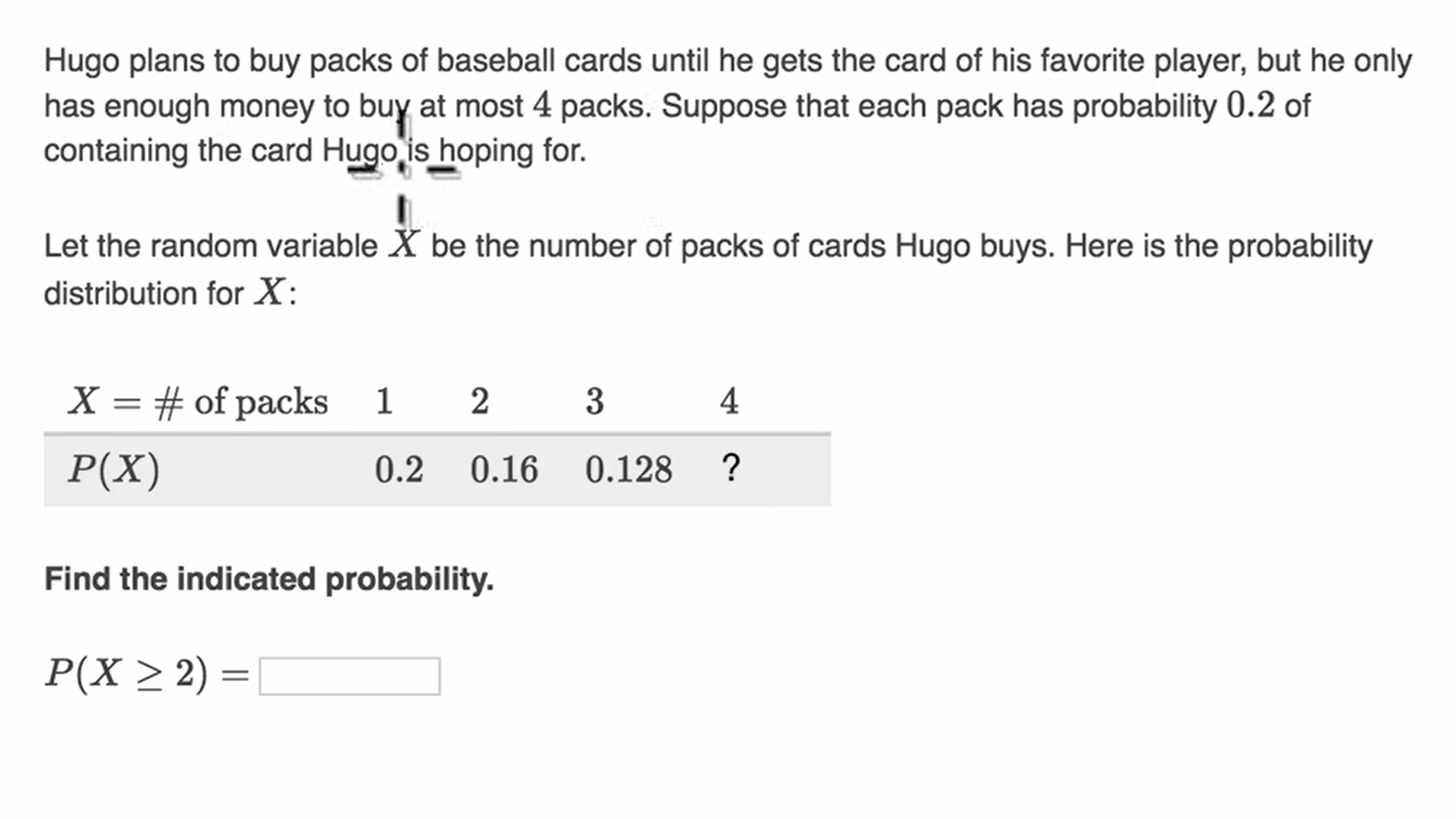
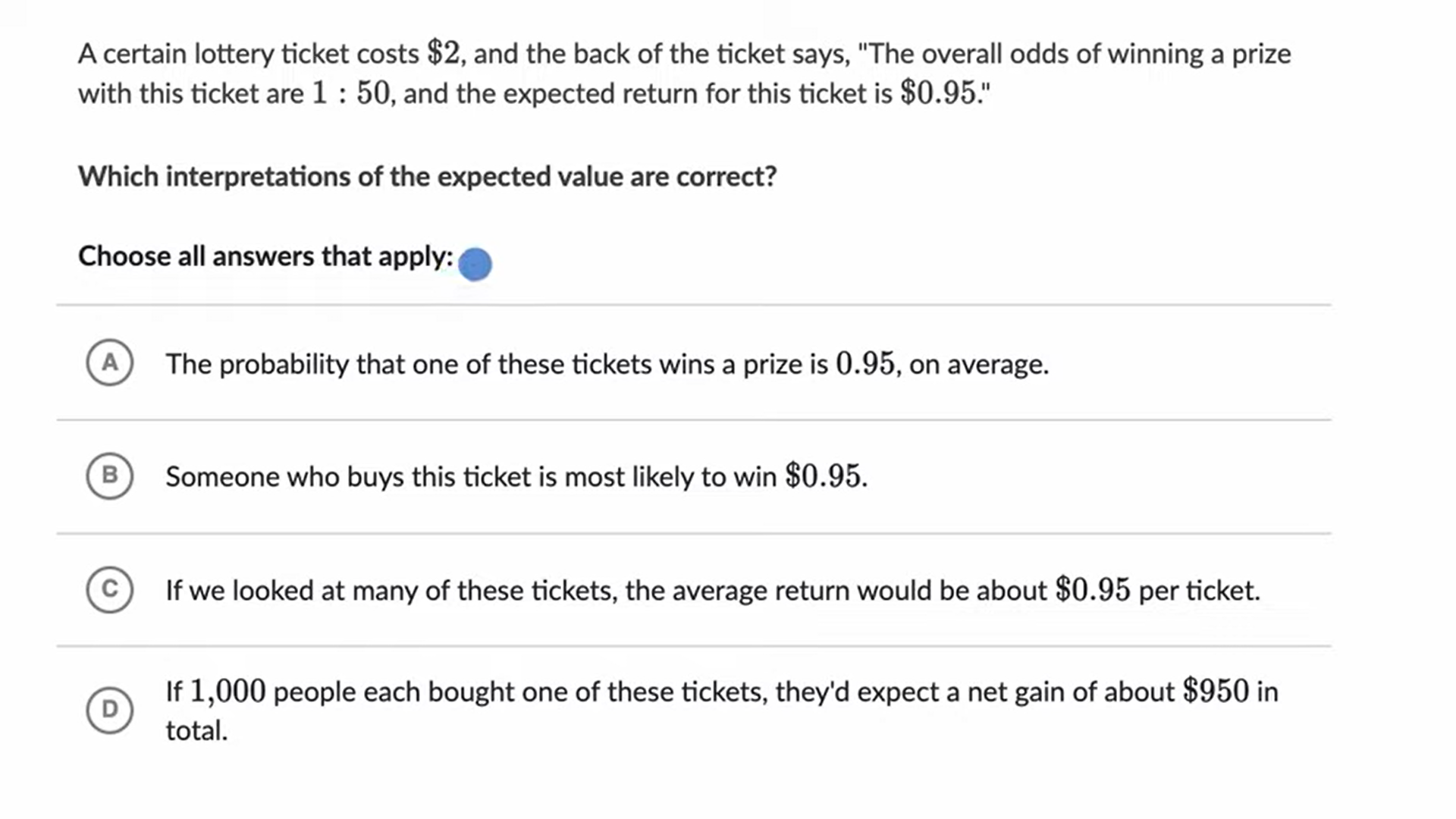
**Expected value**

1)

2)



3)

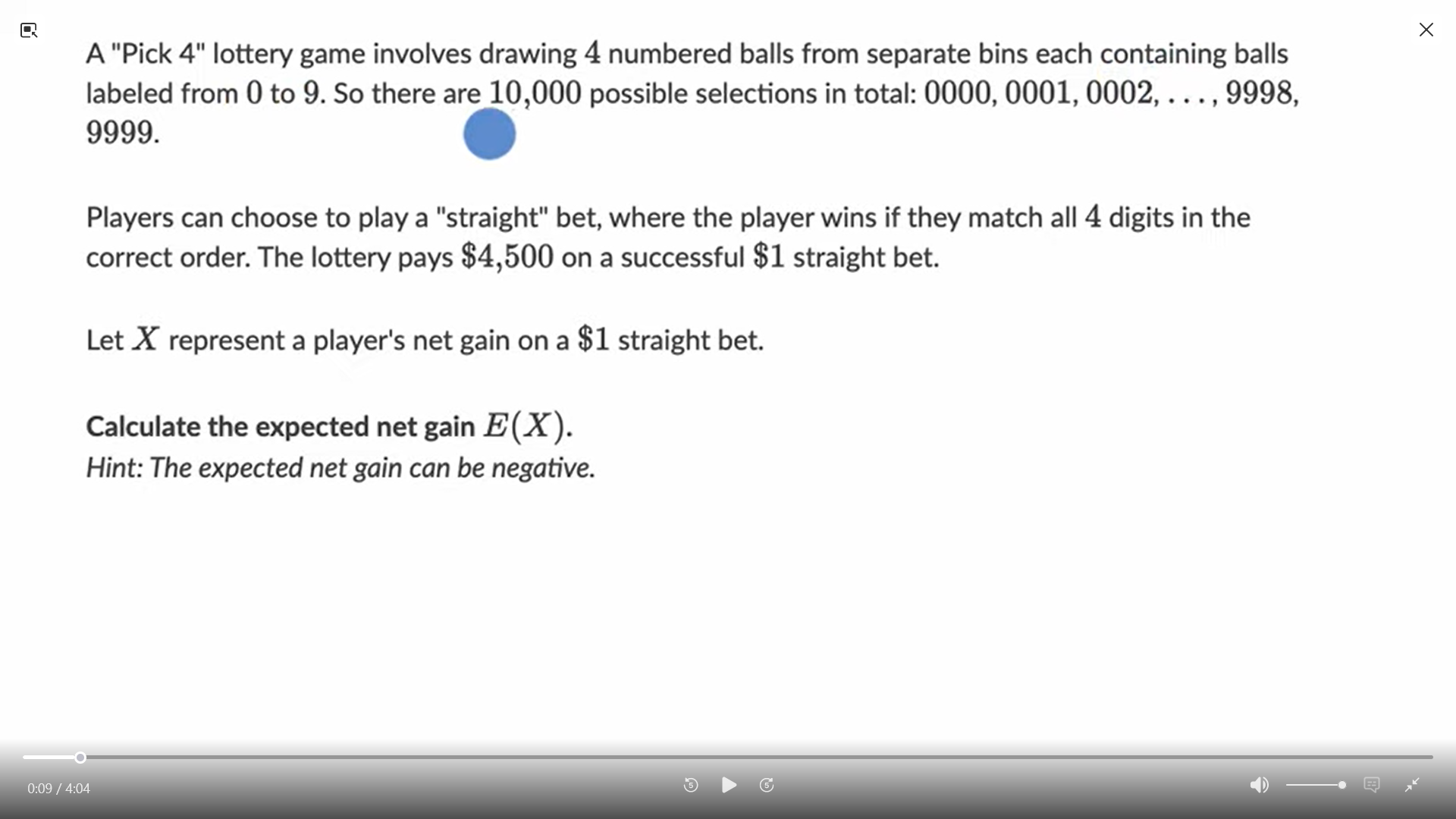
A construction company is considering submitting bids for two contracts. It will cost the company ‍$10,000 to prepare and submit the bids, and if won, each bid would produce $50,000 of income to the company. The company estimates that it has a 10% chance of winning any given bid.

Here is the probability distribution of *X* = the number of bids the company wins, and *M* = the amount of money the company profits from the bids.

|  |  |  |  |
| --- | --- | --- | --- |
| *X* = the number of bids won | 0 | 1 | 2 |
| *M* = profit |  |  |  |
| Probability |  |  |  |

Calculate the mean of *M*.

4)



5)

