

Courseware

**Updates & News** 

Calendar

Wiki

Discussion

**Progress** 

## L6 PROBLEM 3 (1/1 point)

Consider a similar problem to the Monty Hall problem:

In this problem, instead of 3 doors, 1 car, and 2 goats, instead there are 4 doors, 2 cars and 2 goats.

As in the Monty Hall problem, the player chooses a door, and then the host opens a door hiding a goat. With simulation or hand calculation, calculate the probability that switching into a door will lead you to a car. Enter your answer as a fraction or decimal in the following box:

3/4

Help

3 4

Answer: 3/4

## **EXPLANATION:**

75%.

There's 50/50 chance that the first door you chose will hide either a goat or a car. If the first choice hid a goat, then the door host opened for you reveals the one remaining goat, so if you switch you'll be getting a car for sure. If the first choice hid a car, then two remaining doors each hide a car and a goat, so there's 50% chance of getting a car by switching. Therefore there's overall 75% chance of getting a car by switching.

Check

Hide Answer

**Show Discussion** 

New Post



EdX offers interactive online classes and MOOCs from the world's best universities. Online courses from MITx, HarvardX, BerkeleyX, UTx and many other universities. Topics include biology, business, chemistry, computer science, economics, finance, electronics,

**About & Company Info** 

About

News

Contact

Follow Us



Twitter



Facebook



Meetup

engineering, food and nutrition, history, humanities, law, literature, math, medicine, music, philosophy, physics, science, statistics and more. EdX is a non-profit online initiative created by founding partners Harvard and MIT.

 $\ \ \, \mathbb{C}$  2014 edX, some rights reserved.

Terms of Service and Honor Code

Privacy Policy (Revised 4/16/2014)

FAQ

edX Blog

**in** LinkedIn



Google+

Donate to edX

Jobs at edX