

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:

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](#)

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.

© 2014 edX, some rights reserved.

[Terms of Service and Honor Code](#)

[Privacy Policy \(Revised 4/16/2014\)](#)

[FAQ](#)

[edX Blog](#)

[Donate to edX](#)

[Jobs at edX](#)

 [LinkedIn](#)

 [Google+](#)