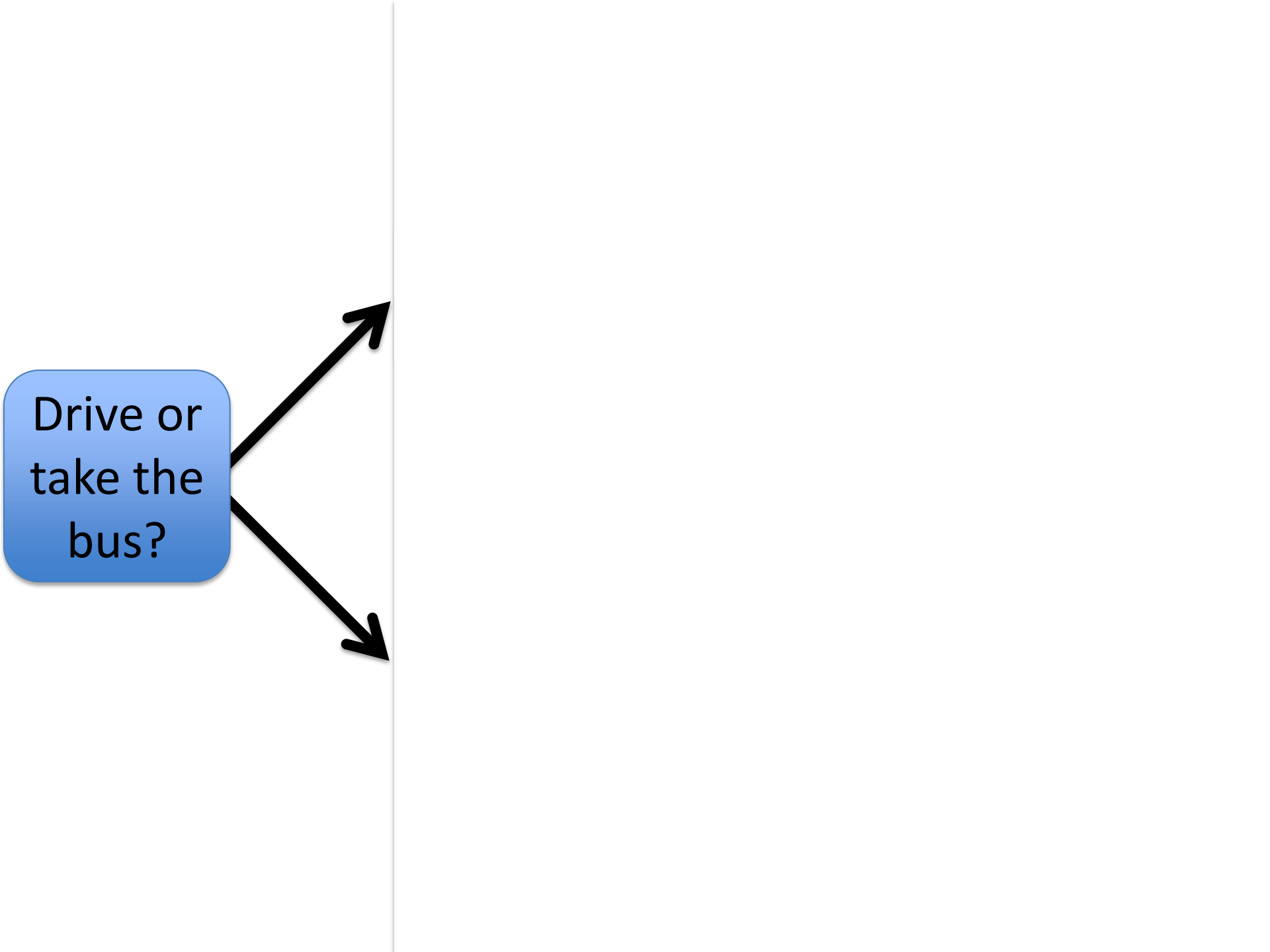
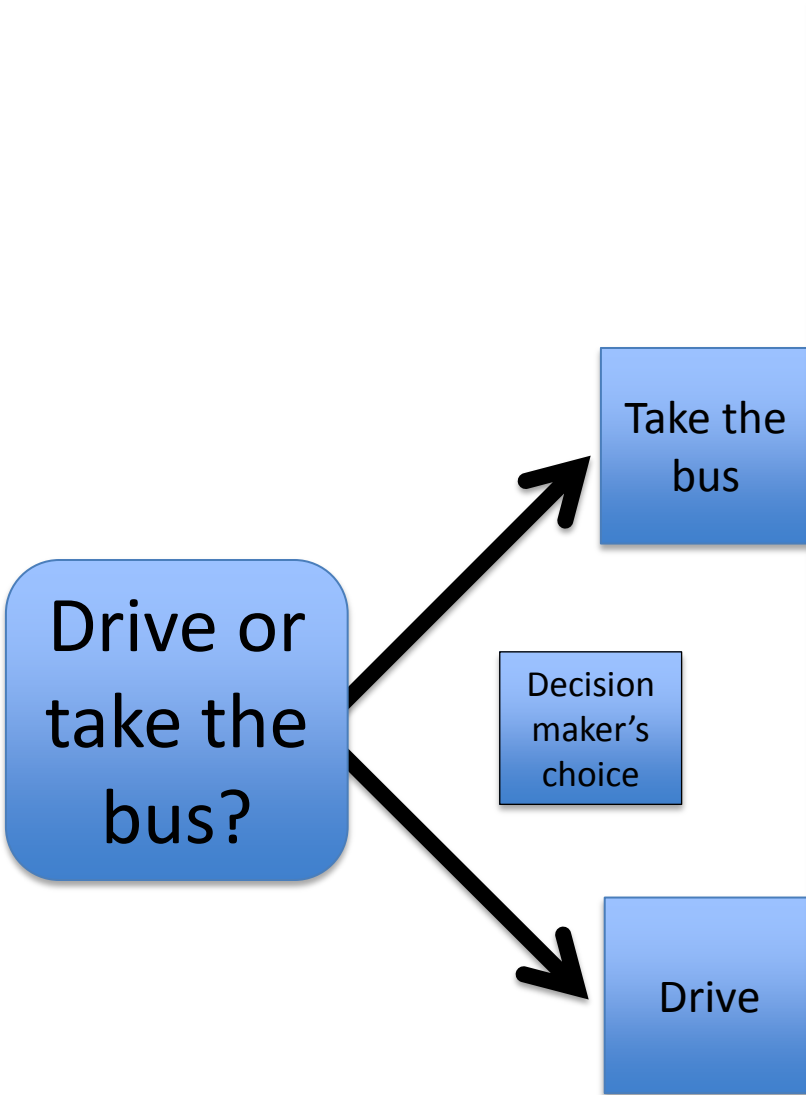


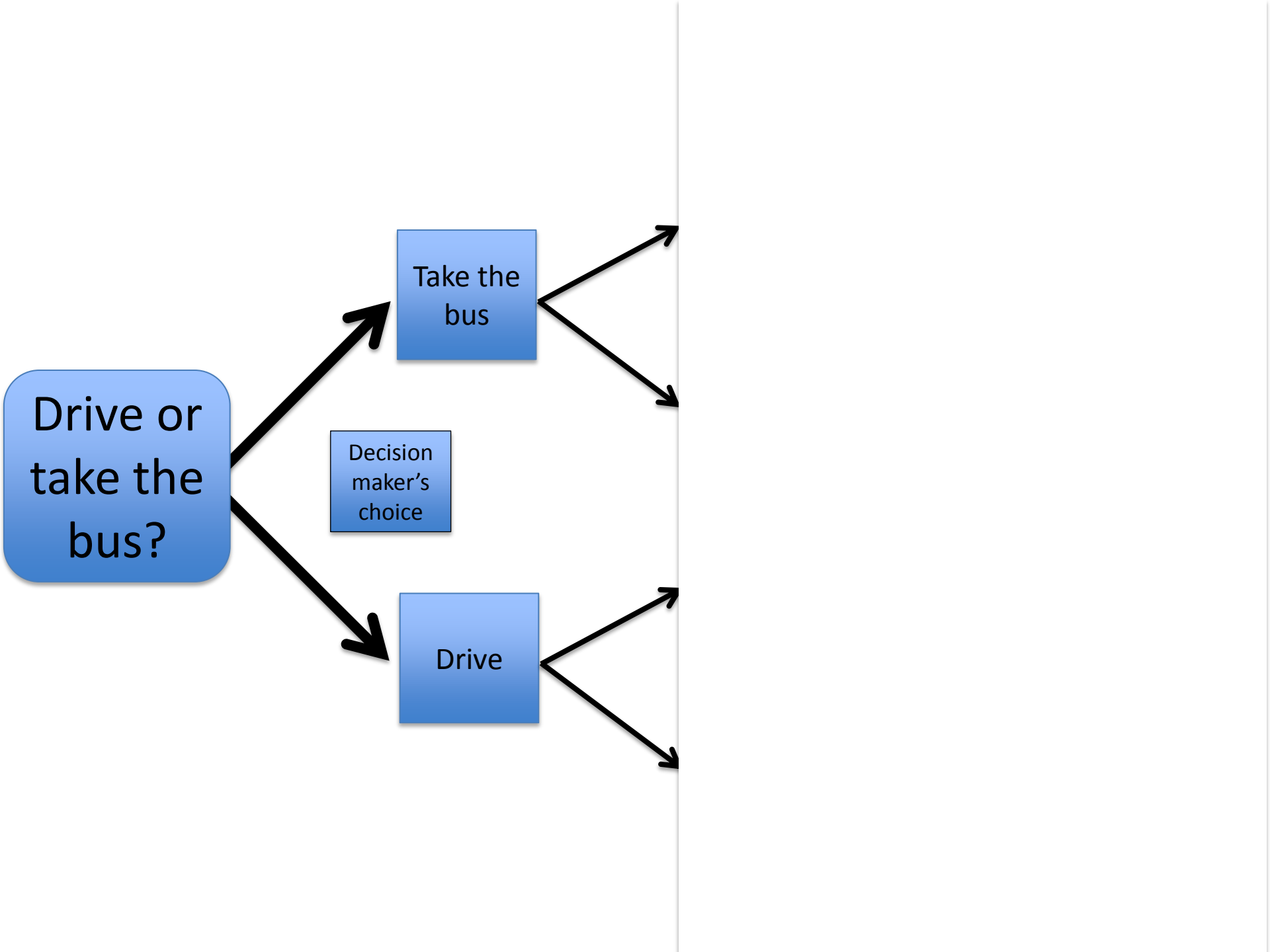
Animations

Drive or
take the
bus?

Drive or
take the
bus?

A blue rounded square box with a white border and a slight drop shadow is positioned on the left side of the image. Inside the box, the text "Drive or take the bus?" is written in a black, sans-serif font, arranged in three lines. From the right side of the box, two black arrows originate. One arrow points upwards and to the right, while the other points downwards and to the right. Both arrows converge towards a thin, vertical black line that runs down the center of the image, extending from the top to the bottom of the frame.



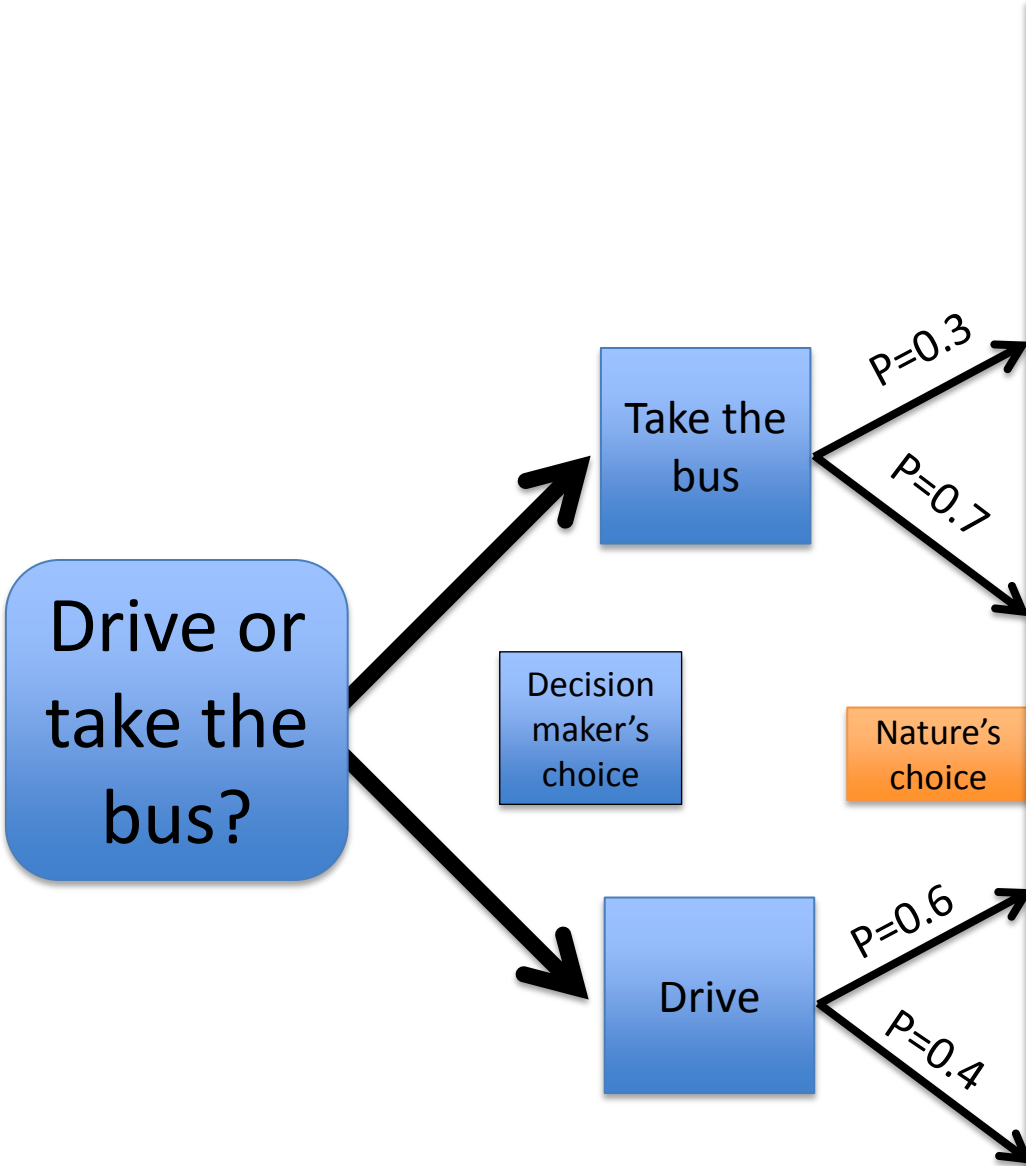


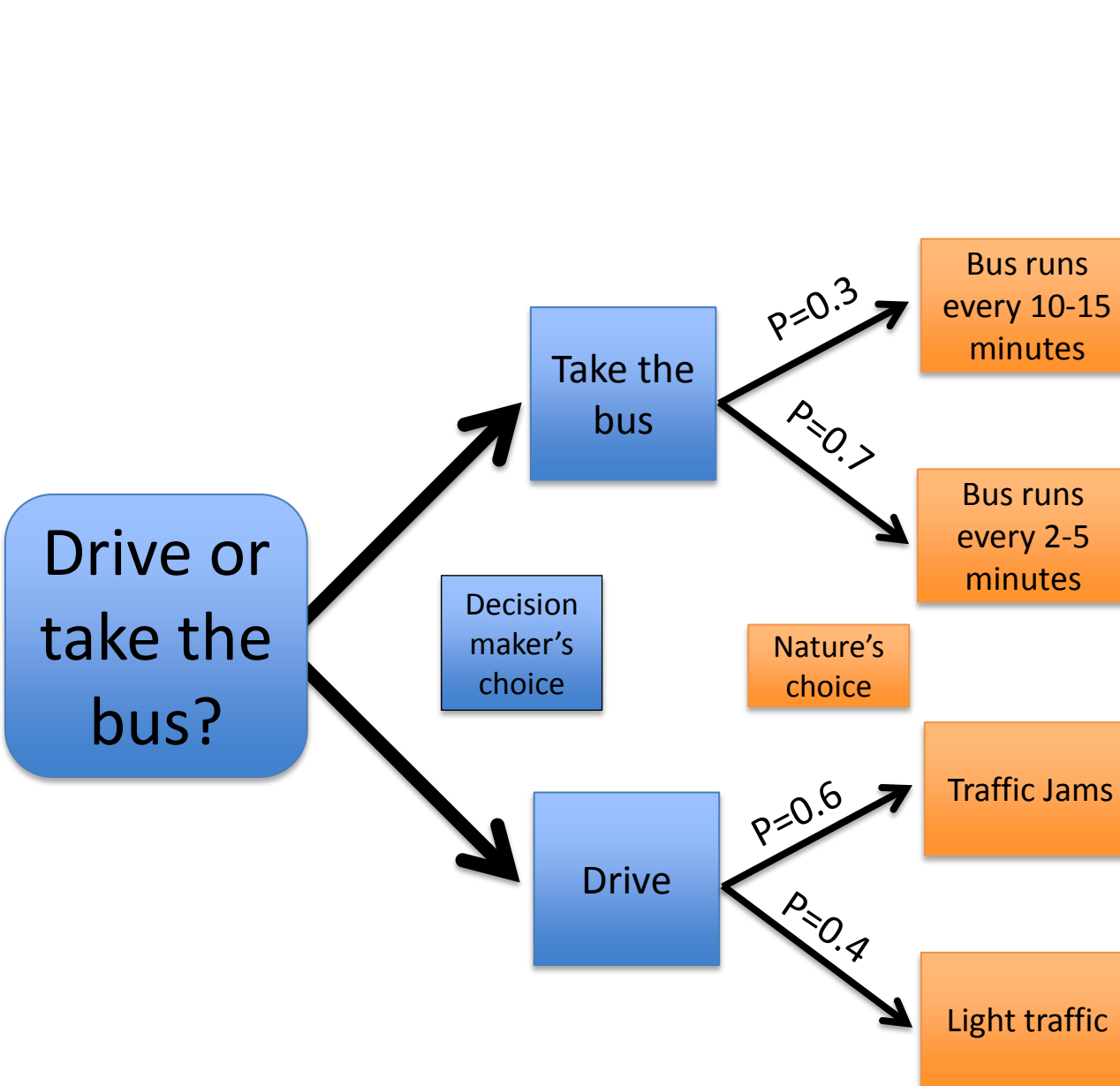
Drive or
take the
bus?

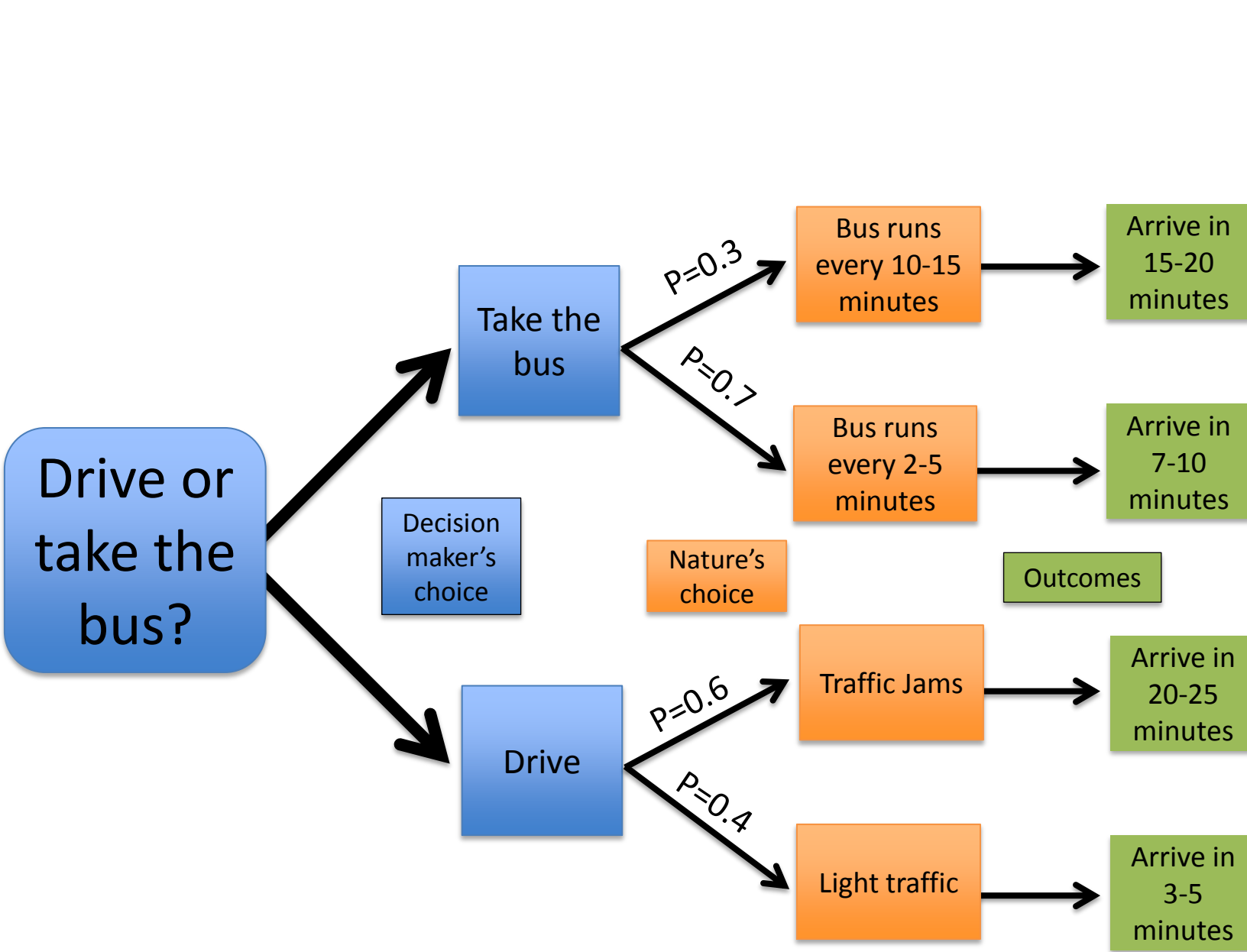
Take the
bus

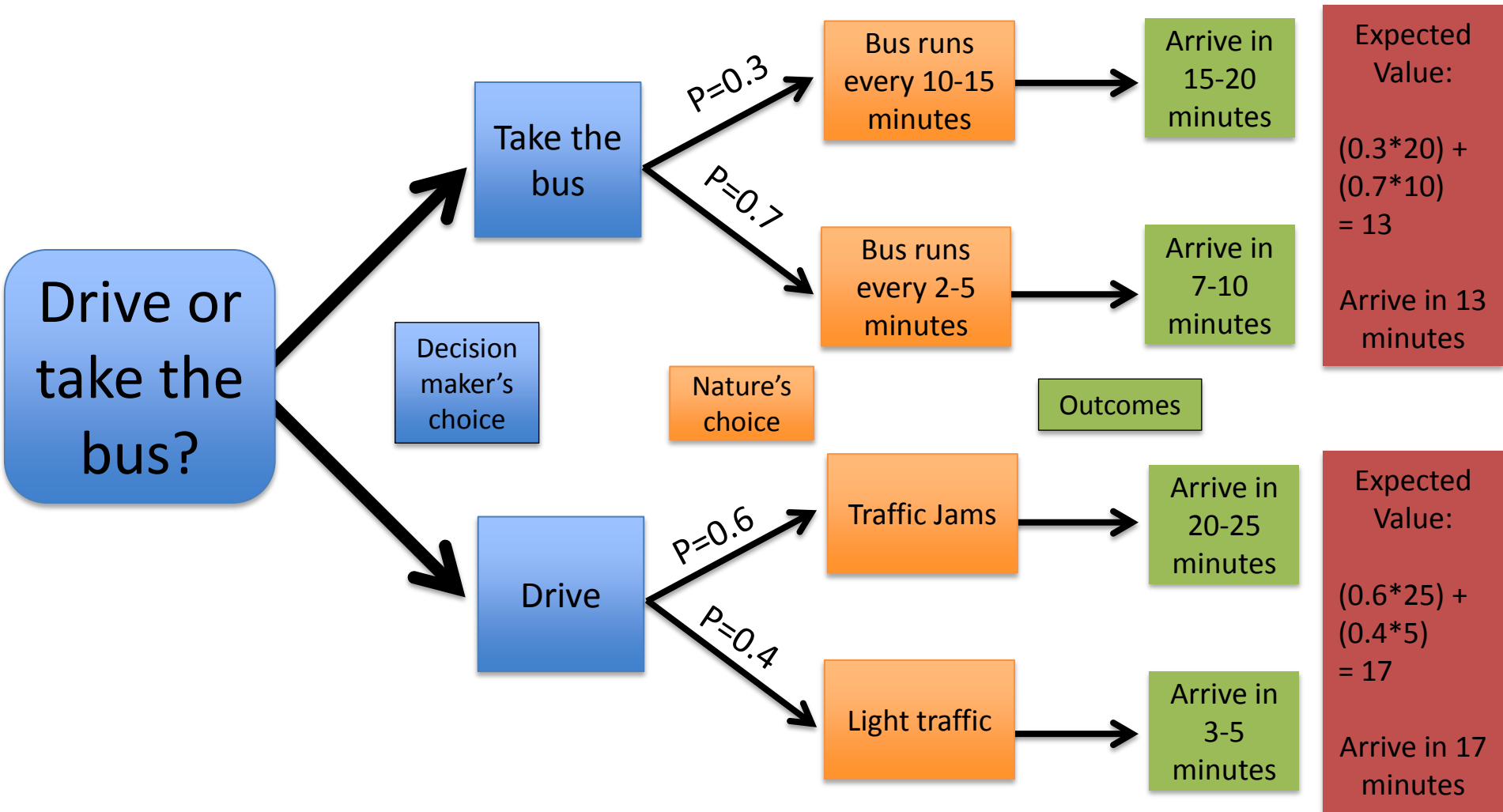
Decision
maker's
choice

Drive

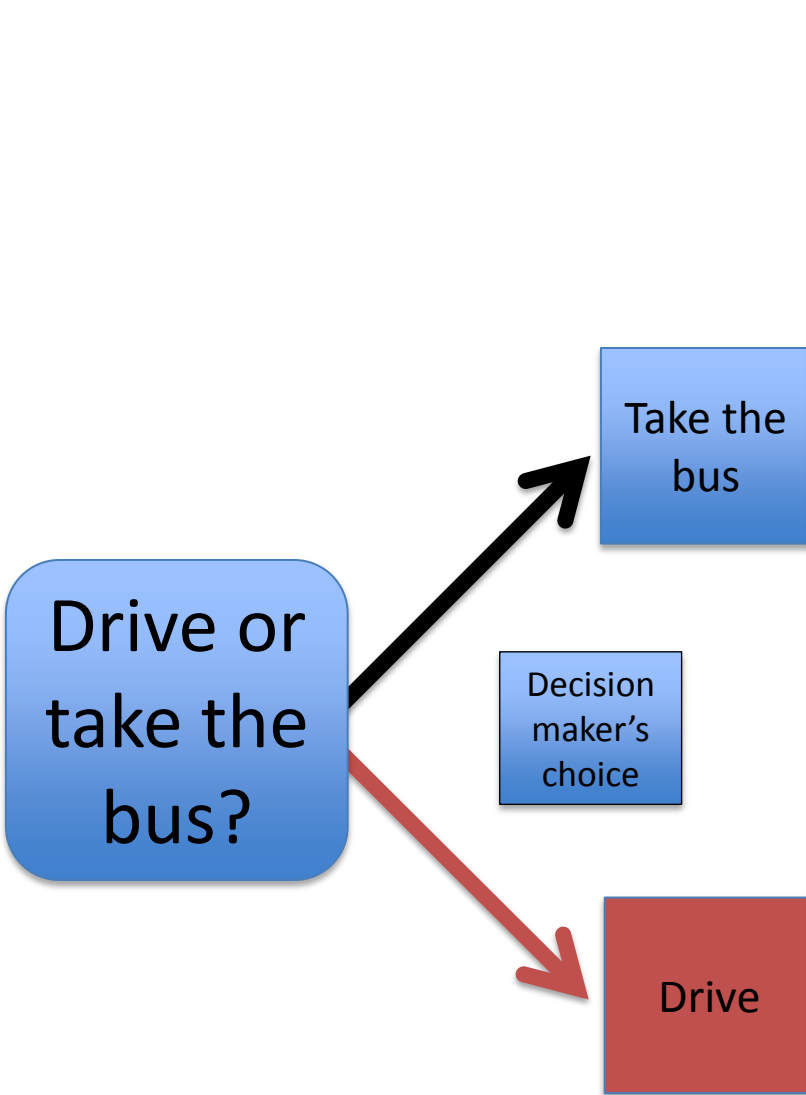


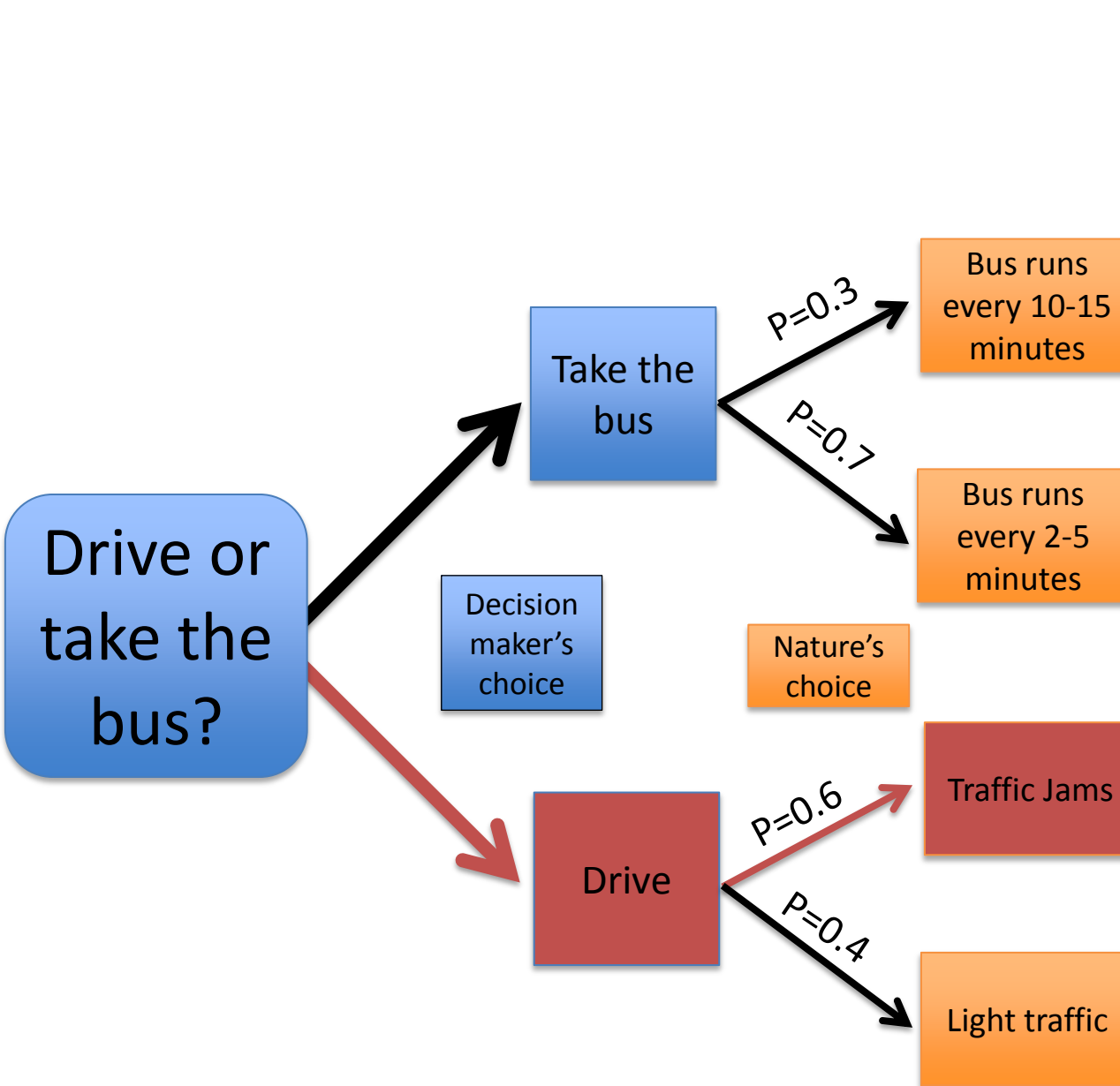


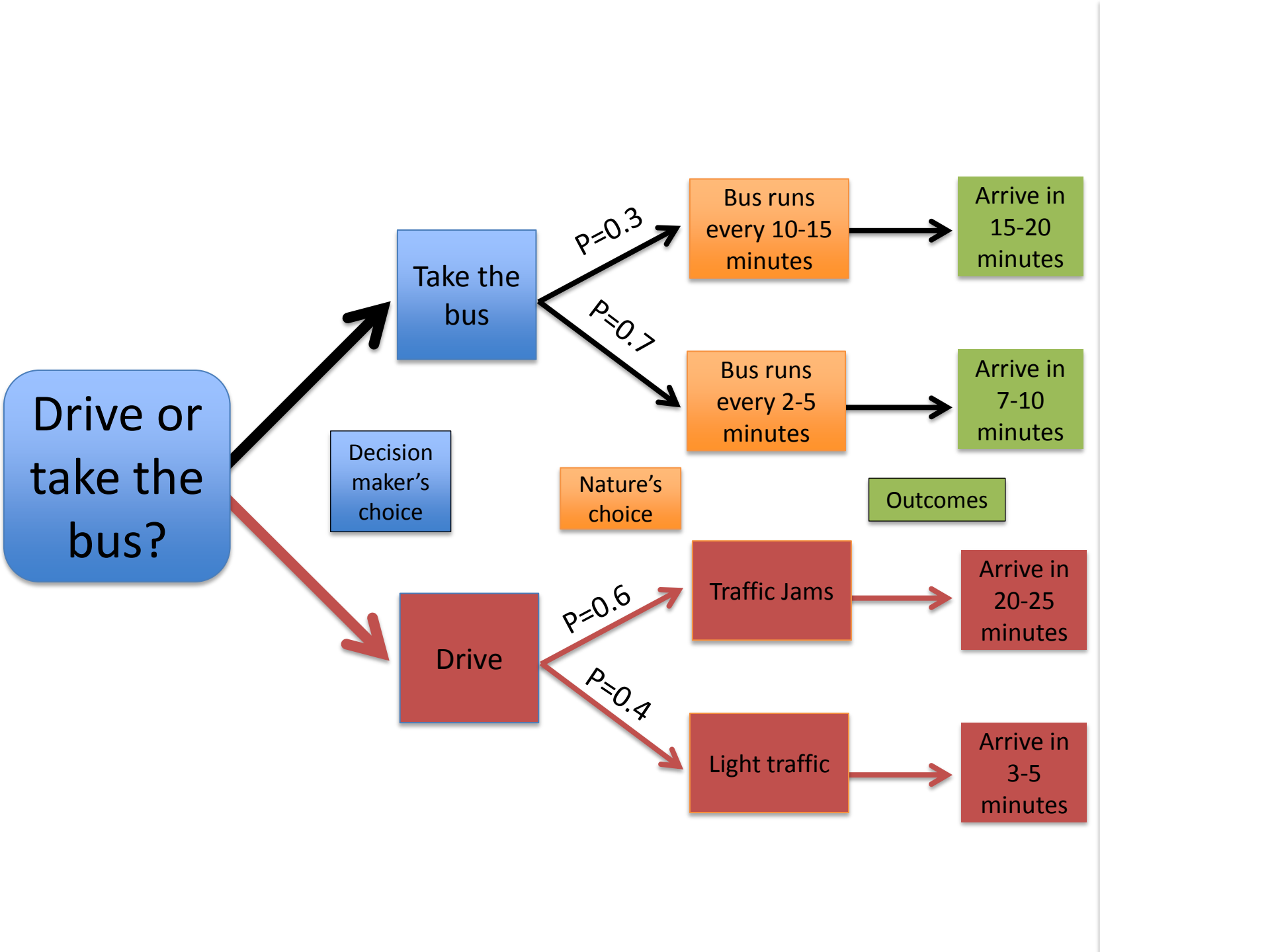




Calculating Expected Value







Drive or take the bus?

Take the bus

Decision maker's choice

Nature's choice

Outcomes

Drive

Bus runs every 10-15 minutes

Arrive in 15-20 minutes

Bus runs every 2-5 minutes

Arrive in 7-10 minutes

Traffic Jams

Arrive in 20-25 minutes

Light traffic

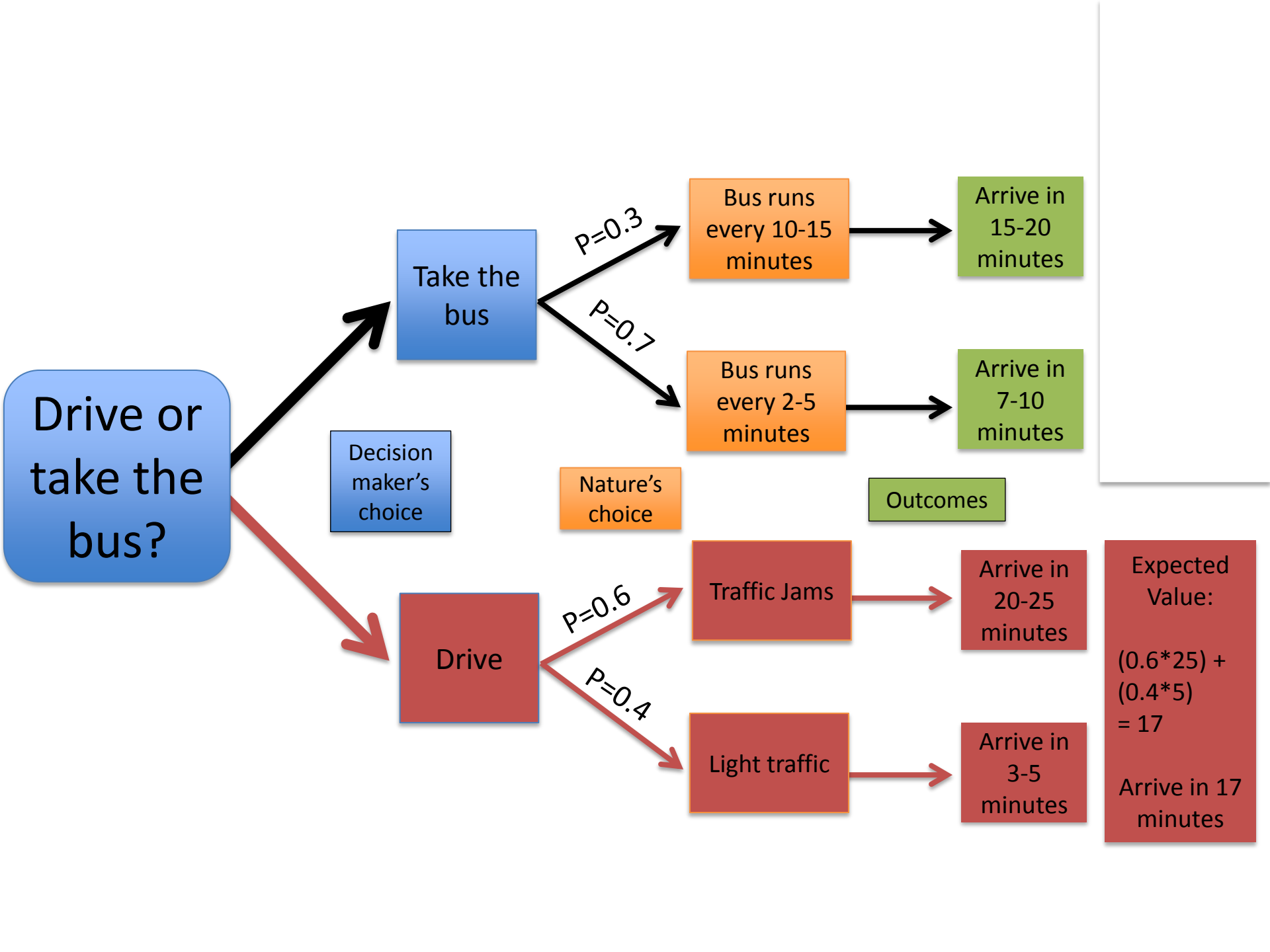
Arrive in 3-5 minutes

P=0.3

P=0.7

P=0.6

P=0.4



Drive or take the bus?

Take the bus

Decision maker's choice

Nature's choice

Outcomes

Drive

Bus runs every 10-15 minutes

Arrive in 15-20 minutes

Bus runs every 2-5 minutes

Arrive in 7-10 minutes

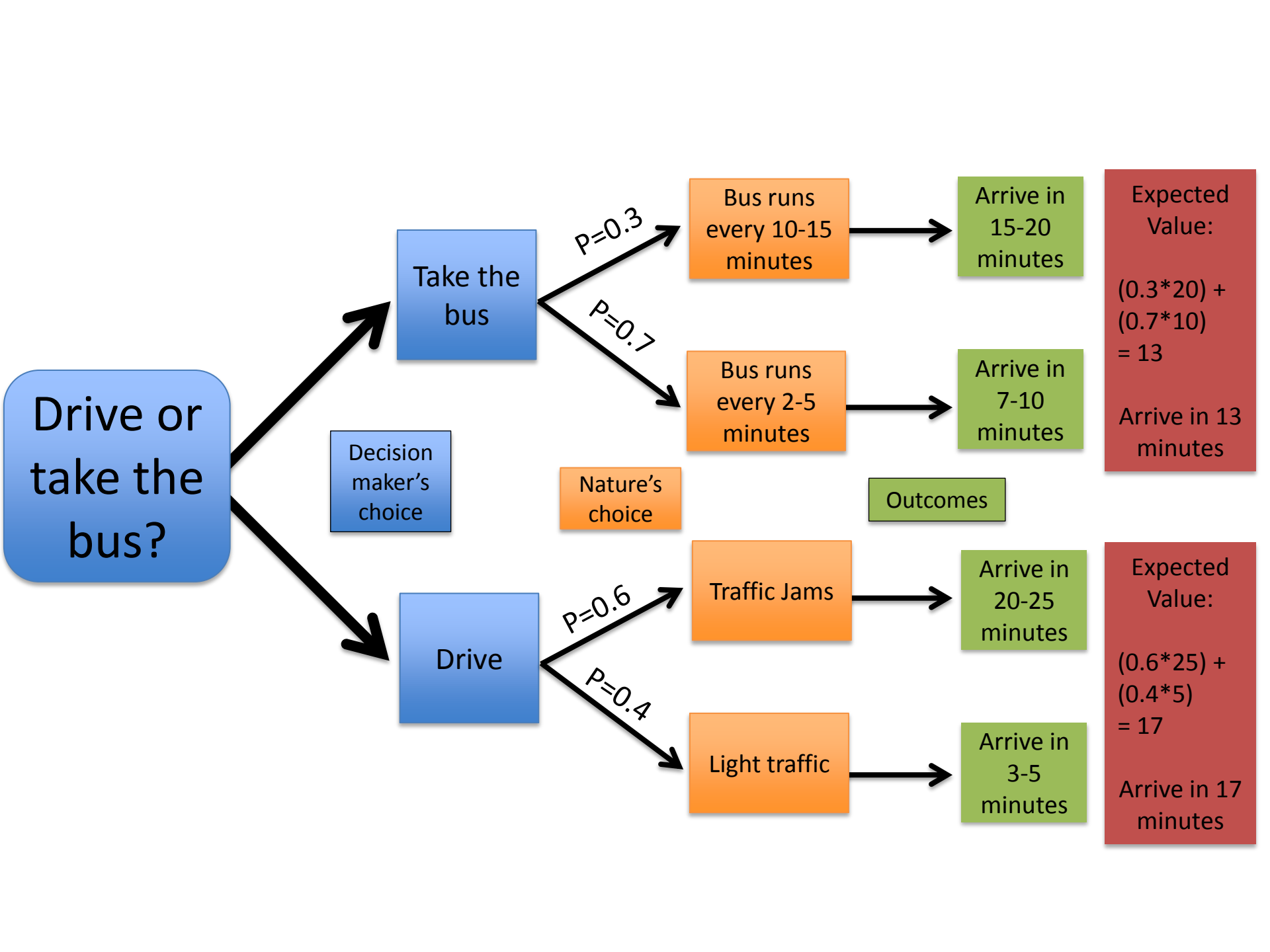
Traffic Jams

Arrive in 20-25 minutes

Light traffic

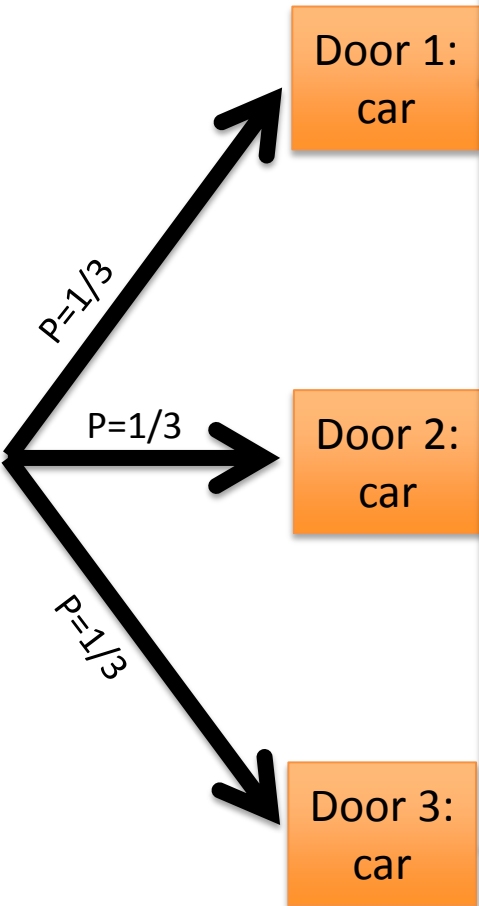
Arrive in 3-5 minutes

Expected Value:
 $(0.6 * 25) + (0.4 * 5) = 17$
Arrive in 17 minutes



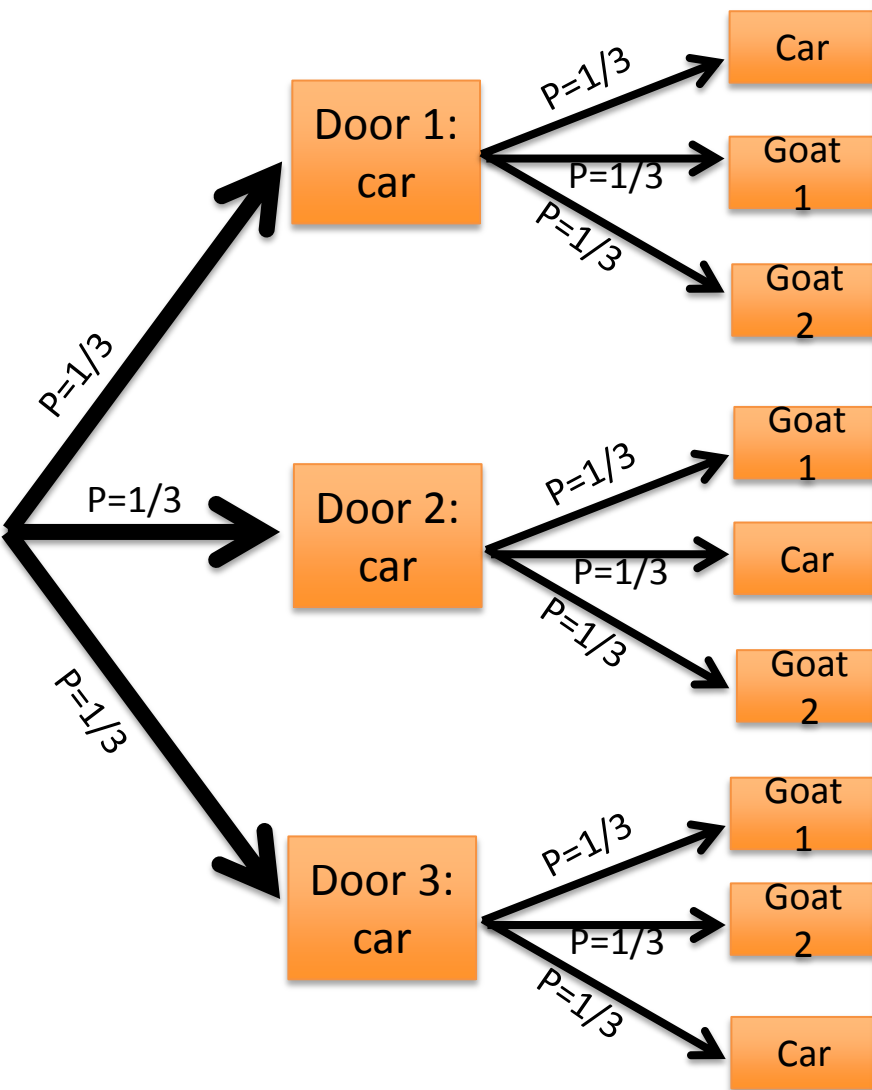
Monty Hall

Host placed
a car behind
a door



Host placed
a car behind
a door

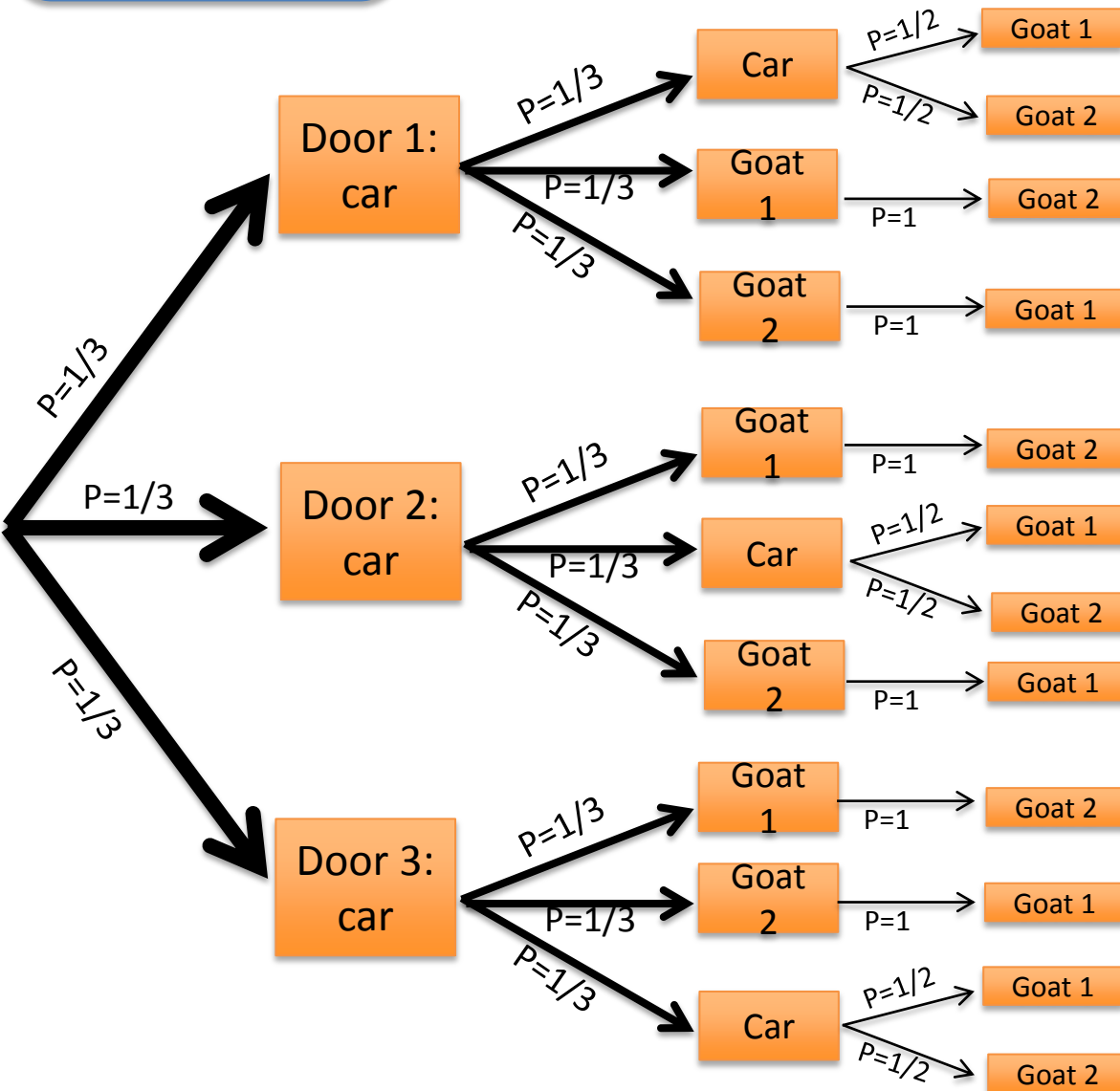
Contestant
selects a door



Host placed
a car behind
a door

Contestant
selects a door

Assistant
Reveals a
goat

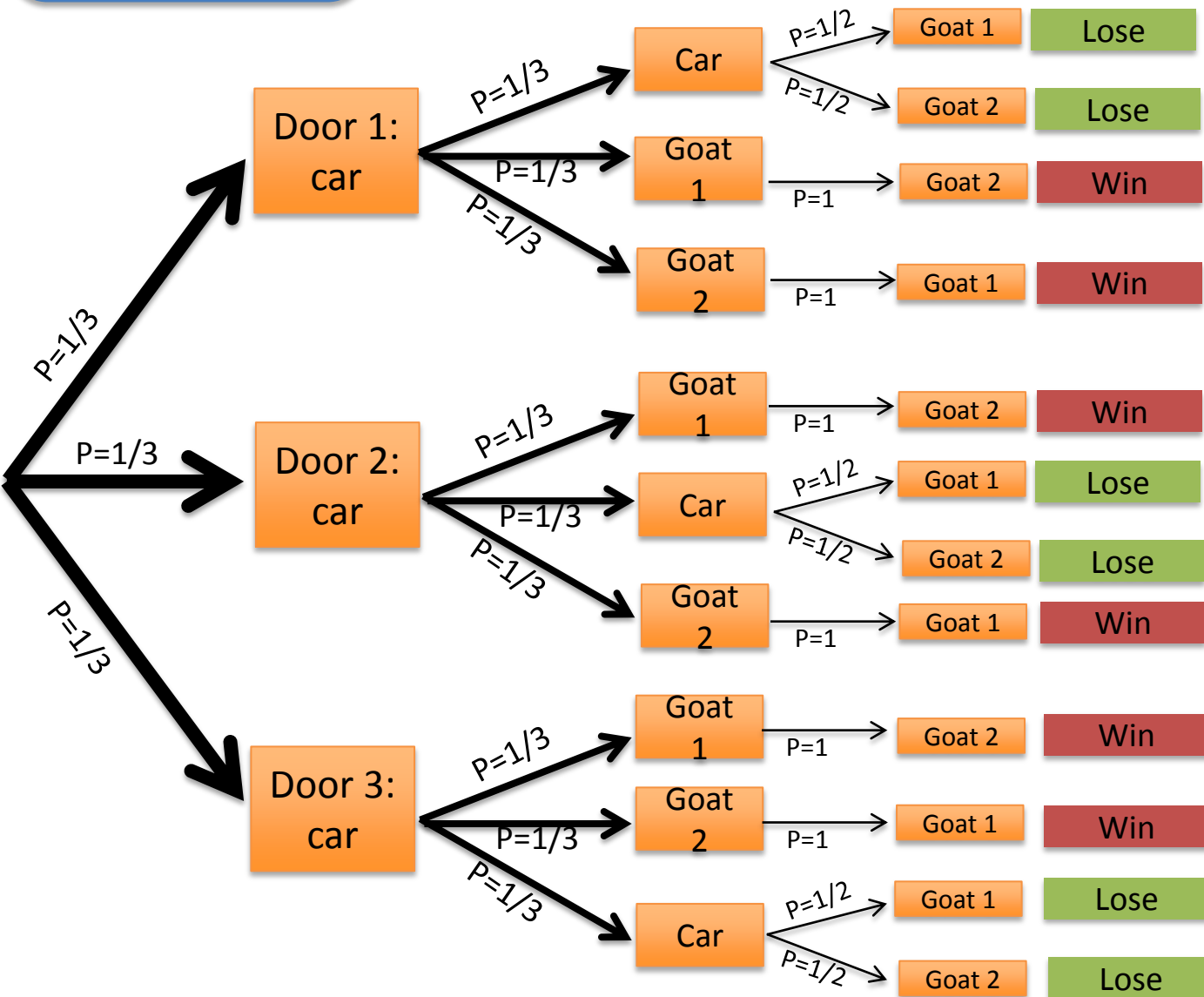


Host placed
a car behind
a door

Contestant
selects a door

Assistant
Reveals a
goat

Outcome
if you
switch



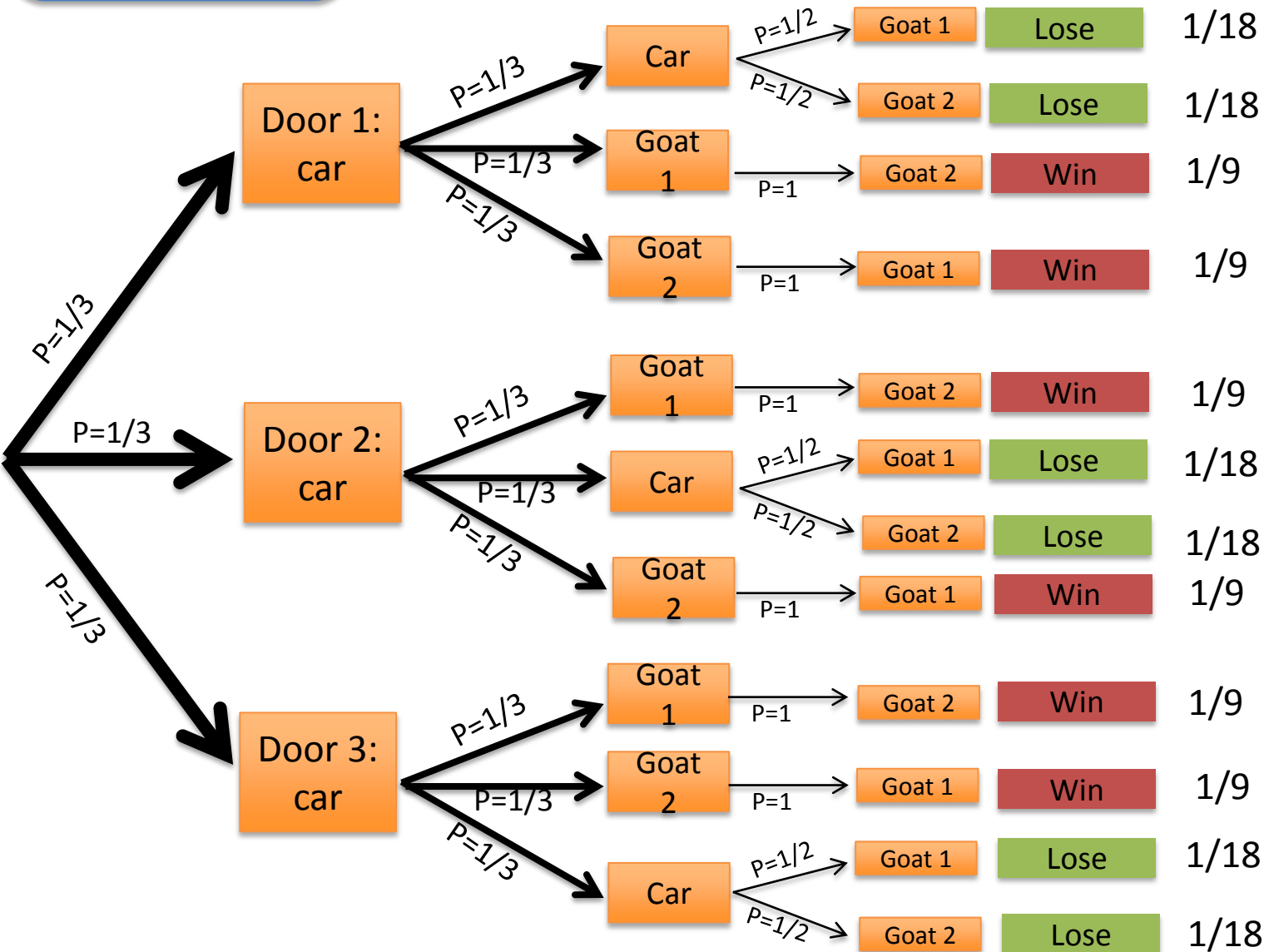
Host placed
a car behind
a door

Contestant
selects a door

Assistant
Reveals a
goat

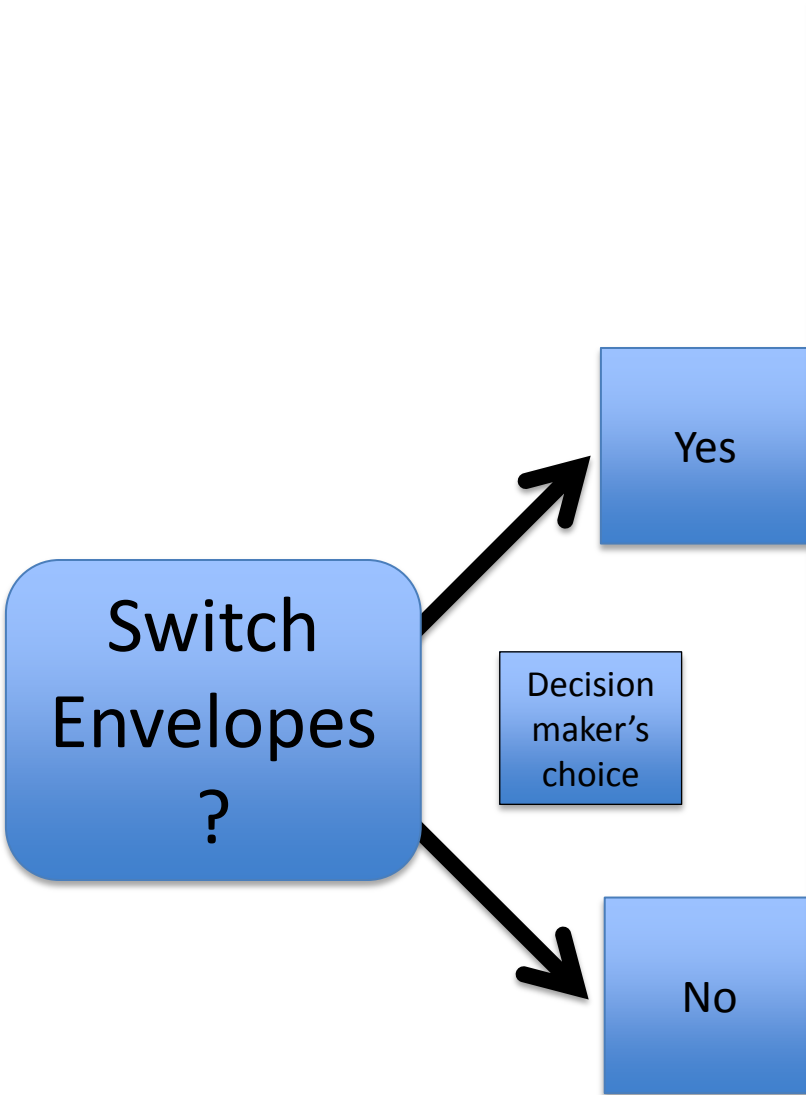
Outcome
if you
switch

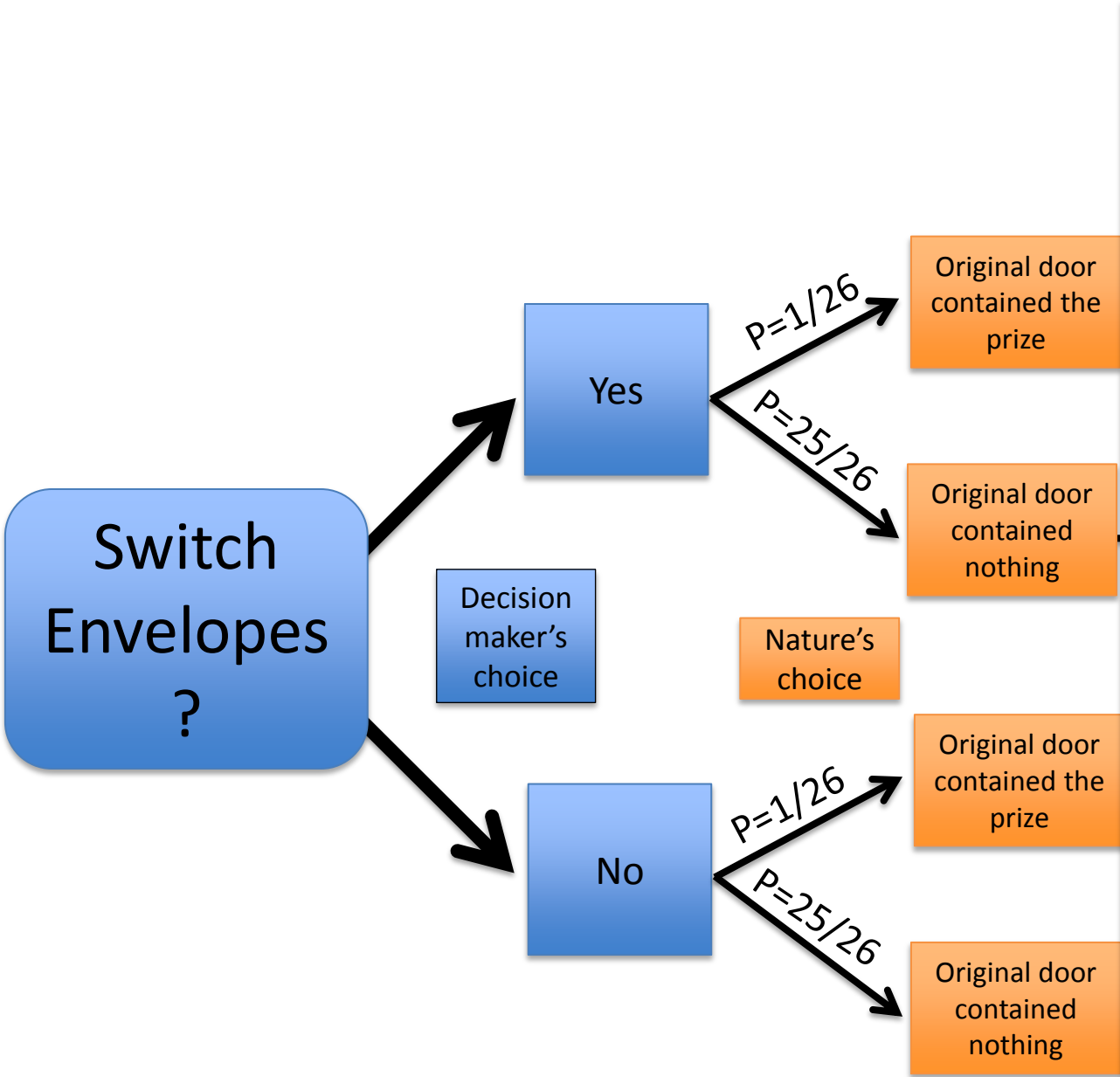
Probability

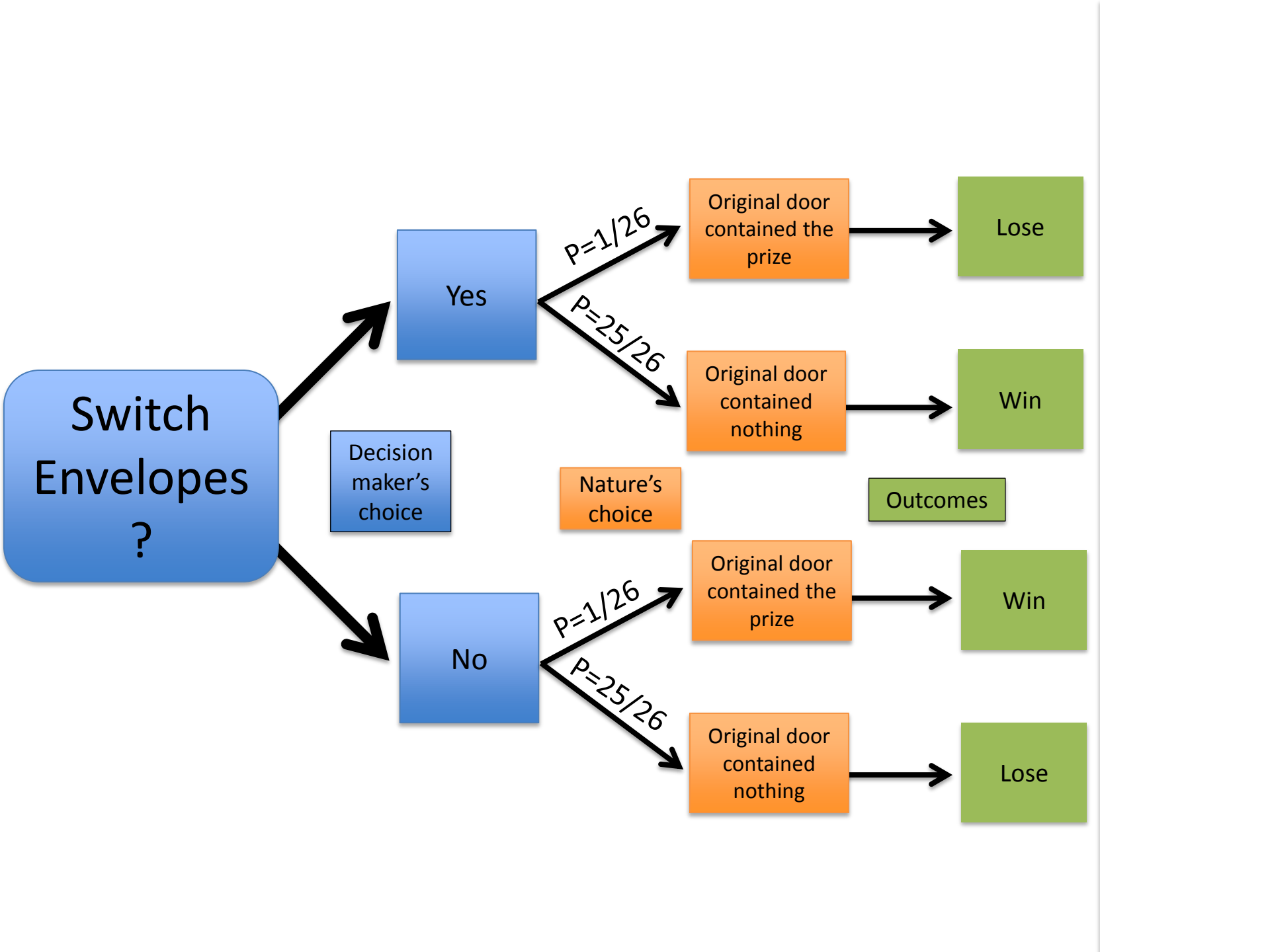


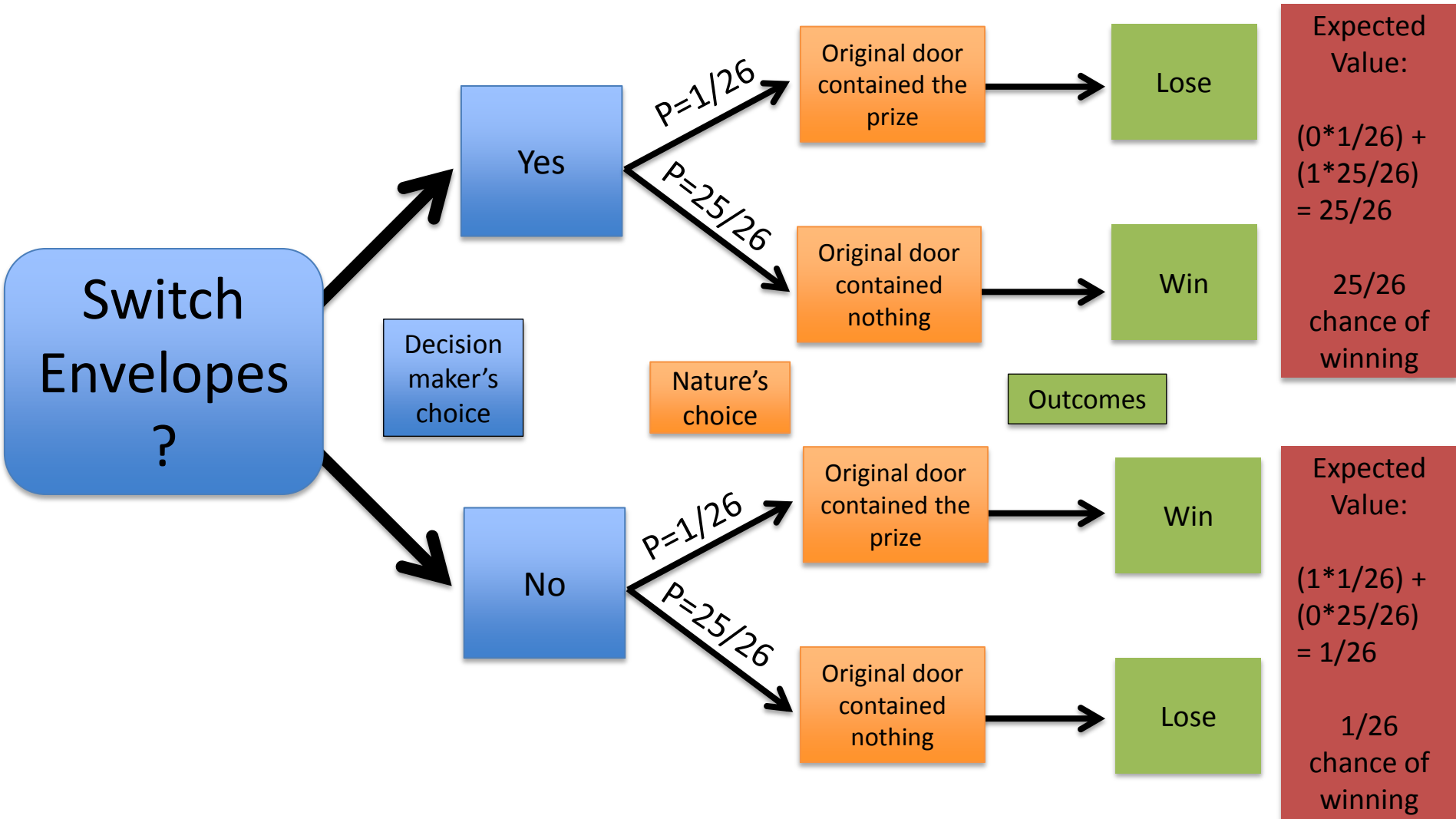
**2/3 of the
time,
switching
doors
wins the
car!**

26 Envelope

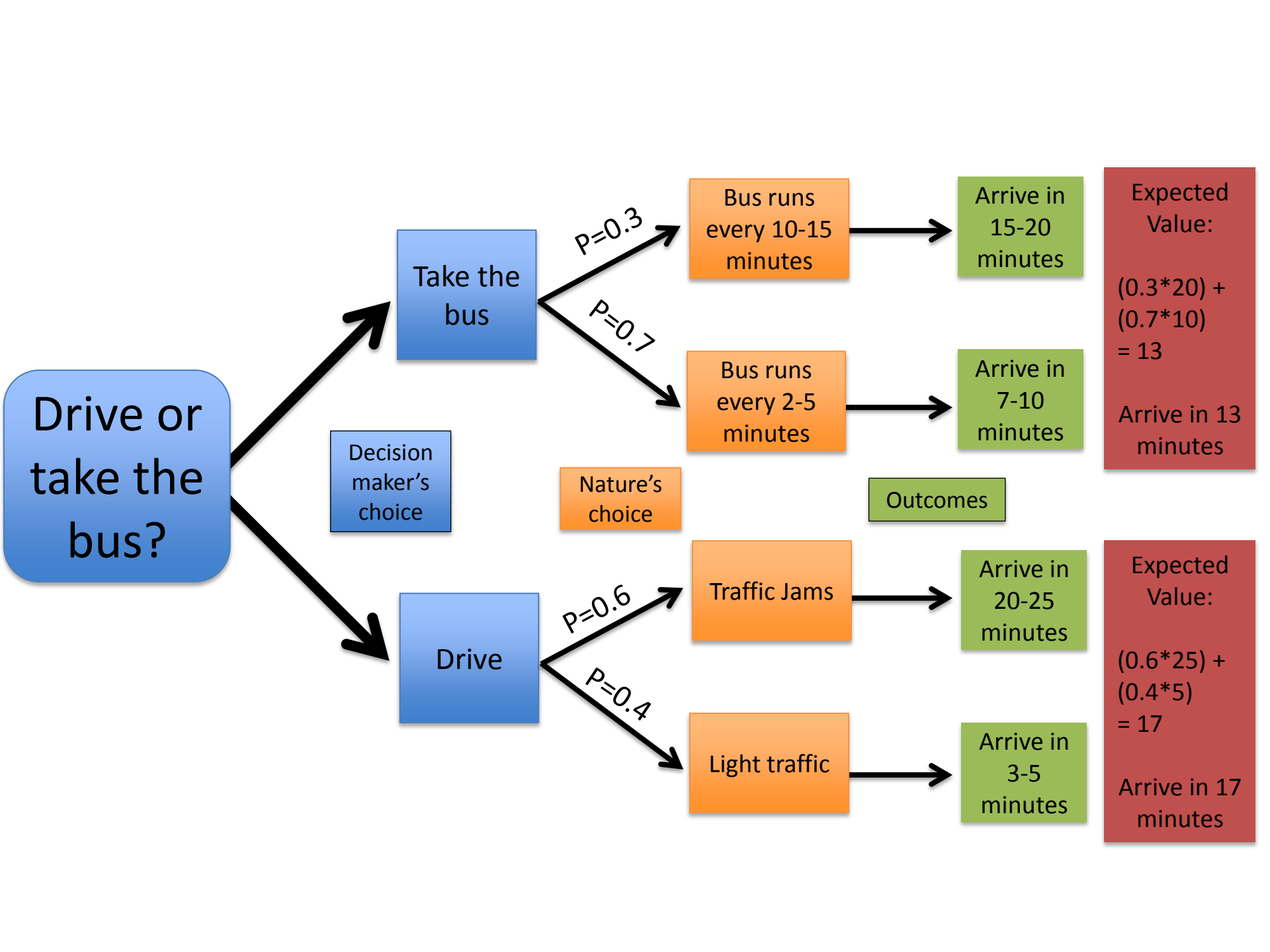








Finished Graphics



Drive or take the bus?

Decision maker's choice

Take the bus

$P=0.3$

$P=0.7$

Bus runs every 10-15 minutes

Bus runs every 2-5 minutes

Nature's choice

Outcomes

Arrive in 15-20 minutes

Arrive in 7-10 minutes

Expected Value:
 $(0.3 \cdot 20) + (0.7 \cdot 10) = 13$
 Arrive in 13 minutes

Drive

$P=0.6$

$P=0.4$

Traffic Jams

Light traffic

Arrive in 20-25 minutes

Arrive in 3-5 minutes

Expected Value:
 $(0.6 \cdot 25) + (0.4 \cdot 5) = 17$
 Arrive in 17 minutes

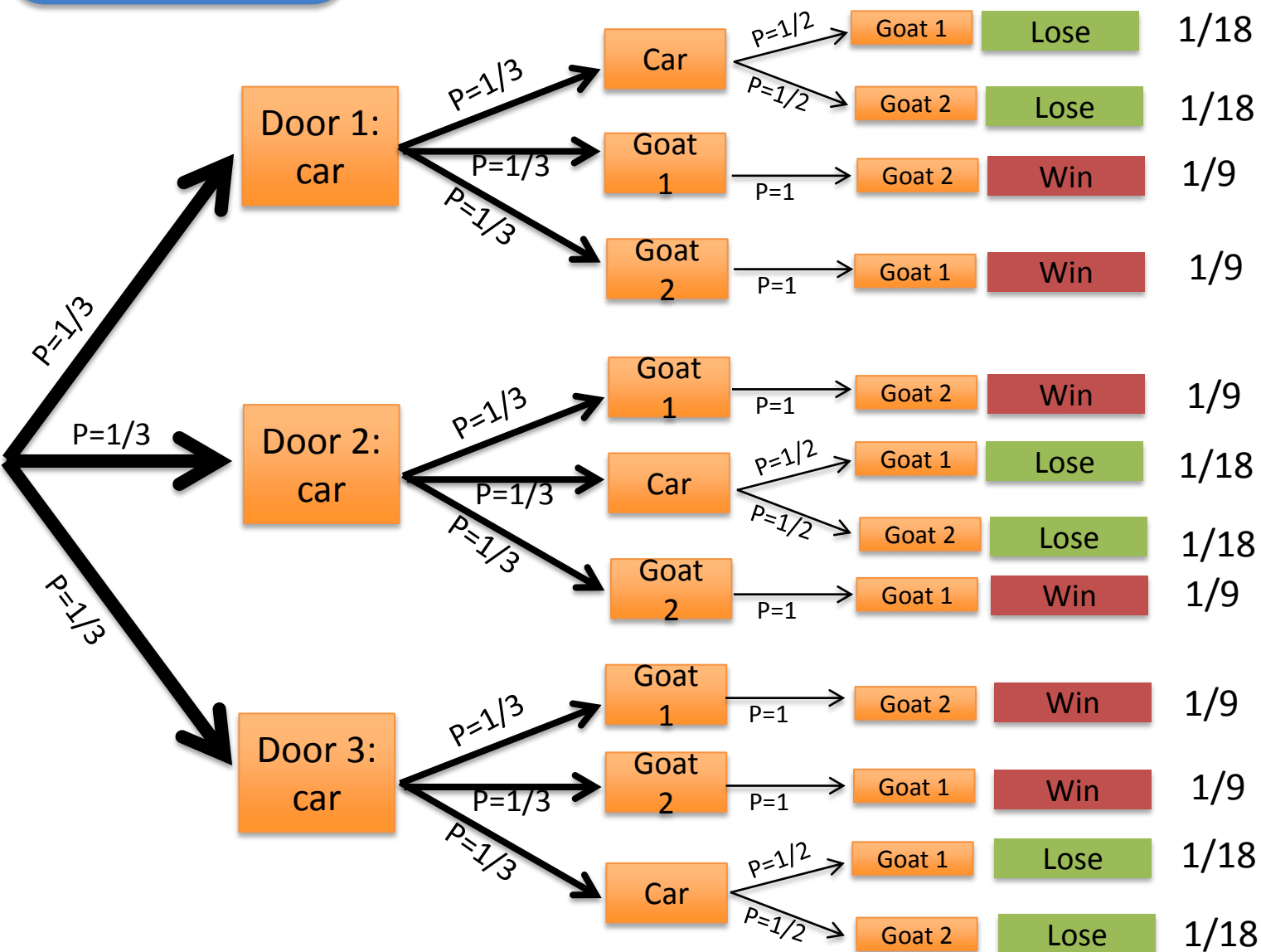
Host placed
a car behind
a door

Contestant
selects a door

Assistant
Reveals a
goat

Outcome
if you
switch

Probability



**2/3 of the
time,
switching
doors
wins the
car!**

