

Tigers and True Love

A prisoner with (paradoxically) many true loves is given a series of trials by an evil jailer:

The jailer says truthfully, “Behind each door I have placed either a hungry tiger or one of your true loves. Tigers could be behind all the doors or one of your true loves could be behind each door. On each door is a sign that is either true or false. The only concession I have made is that the signs on the doors are consistent with what is behind the doors! In each case you must choose a door!”

1. First Trial:

The sign on door *one* says, In this room there is one of your true loves, and in the other room there is a tiger.

The sign on door *two* says, In one of these rooms there sits one of your true loves, and in one of these rooms there is a tiger.

The evil jailer, who curiously never lies, adds that
one of the statements is true and one is false!
What should the prisoner do?

2. Second Trial:

The statement on door *one* says, At least one of these rooms contains a true love.”

The statement on door *two* says, A tiger is in the other room.

The evil jailer, who curiously never lies, adds that
the two statements are either both true or both false.

Which door should the prisoner open in order to avoid being eaten alive and find a true love?

3. The Third Trial:

The statement on door one says, Either a tiger is in this room or your true love is in the other room.

The statement on door two says, There is a tiger in one room and your true love in the other room.

Again, the jailer claims that either both are true or both are false.

Which should the prisoner open?

4. The Fourth Trial:

The sign on the first door says, At least one room contains a true love.

The sign on the second door says, This room contains a tiger.

As the puzzled prisoner reads these signs, the jailer laughs and says: If a true love is behind door one, the sign on that door is true, otherwise it is false!

Help out the prisoner! What choice should the prisoner make?
