I found and fixed bug 4 while solving bug 3. So I copied the relevant logs below.

1. The bug is somewhere in the rolling of the dice. So within the dice.roll() function.

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| Test | Place a breakpoint on the d.rollI() call in playRound. |
| Prediction | The dice isn’t a fair dice and not returning truly random faces. |
| Result | The dice values seem to be random. |
| Notes | * There is something wrong with DiceValue.getRandom() it seems that SPADE is never returned. * RANDOM.netInt value is too low. It needs to be 1 above the value of DiceValue.SPADE.ordinal(). |

1. Given than spades aren’t being returned which would change dice odds, in turn changing the game odds.

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| --- | --- |
| Test | Add a + 1. Line 26 is of DiceValue is now  RANDOM.netInt( DiceValue.SPADE.ordinal() + 1) |
| Prediction | The odds should be 0.42 |
| Result | The odds are 0.50 |
| Notes | * The odds are not right, but at least now they are consistent. * Is that another bug that wasn’t in the bug report? Or Just part of this bug? |