Part 2

1. Petri nets are live, because it can always fire and none of it's transition is dead. This is because there's always a transition that is enabled and there is always at least two tokens and there's no more than two arcs pointing at transitions.
2. Is bounded, we can check this by building its reachability graph.
3. In Petri net 1 it takes 2 firing sequences. First we fire tokens to the s3 and s4, then we fire s4 token to the s1.
   In petri net 2 it takes 4 firing sequences. First we fire tokens to the s3 and s4, then we fire token s4 to the s1. Then we fire tokens to the s7 and s8, then we fire token s8 to s5.
   In petri net 3 it takes 8 firing sequences. All same steps as before and then we fire tokens from s9 and s10 to s11 and s12 and then we fire s12 token to s9.
4. The shortest path that all tokens are in odd numbered places is 2^n firing sequences long.