

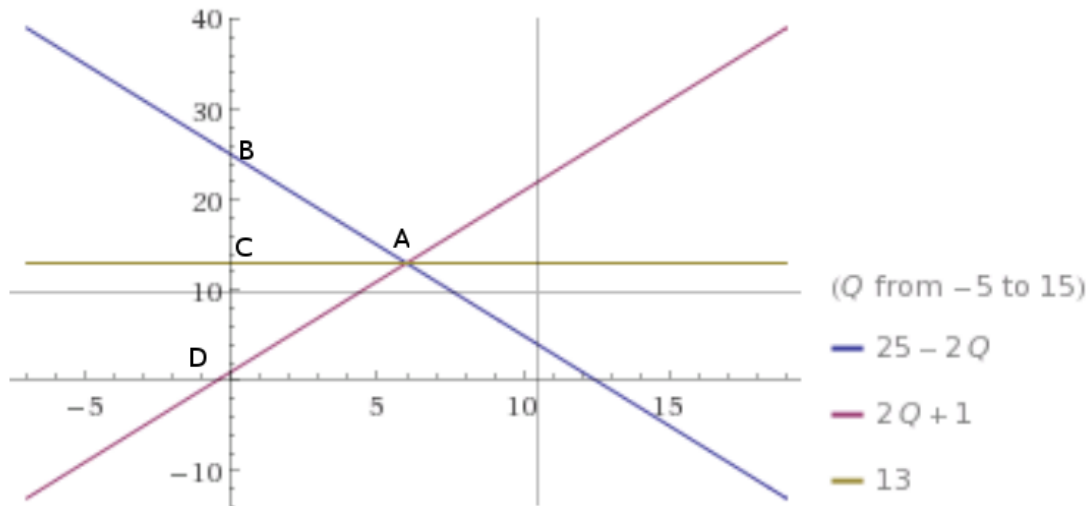
If we have pure competition then demand function equals to supply function

$$25 - 2Q = 2Q + 1$$

$$4Q = 24$$

$$Q = 6$$

So the equilibrium price  $Q=6$ , then demand equals to supply and equals to 13



So if we plot the graph then the area of ABC is consumers surplus, area of ACD producers surplus Point B have coordinates (0, 25) Point C (0, 13) Point A (6, 13) Point D (0, 1)

Then consumers surplus is equal to  $0.5 * 12 * 6 = 36$  producers surplus  $0.5 * 12 * 6 = 36$

we get the same surplus for consumer and producer