

9. Correct. The answer is false. Some but not all of the loss in consumer surplus goes to the monopolist. In the competitive case with a constant cost industry, consumer surplus = $(118.75 - 43.75) \times 37.5 \times 0.5 = 1406.25$. Producer surplus is 0, since each producer is at the minimum of their average total cost. In the monopoly case, consumer surplus is $(118.75 - 92.16) \times 13.30 \times 0.5 = 176.80$. Producer surplus is can be computed in a variety of ways 92.16×13.30 .

$-\int_0^{13.30} (3Q^2 - 50Q + 200)dQ = TR - TC = (P - ATC)(Q) = 635.21$. Social welfare in the monopoly case is then consumer plus producer welfare or $176.80 + 635.21 = 812.01$. The loss in welfare in the monopoly case is $1406.25 - 812.01 = 417.24$.

