

**9. Incorrect. The answer is false not true.** 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 is  $= (118.75 - 43.75) \cdot 37.5 \cdot 0.5 = 1406.25$ . Producer surplus is 0, since each producer is at the minimum of their average total cost. In the monopoly case, consumer surplus is  $(118.75 - 92.16) \cdot 13.30 \cdot 0.5 = 176.82$ . Producer surplus can be computed in a variety of ways  $92.16 \cdot 13.30$ .  $-\int_0^{13.30} (3Q^2 - 50Q + 200)dQ = TR - TC = (P - ATC)(Q) = 635.21$ . Social welfare in the monopoly case is consumer plus producer welfare or  $176.81 + 635.21 = 812.03$ . The loss in welfare in the monopoly case is  $1406.25 - 812.01 = 417.24$ .

