15. Correct. The answer is true. The new marginal revenue curve is 80 until it hits the demand curve at Q = 19.375. To find the monopolists Q at a price of 80, set P = MC or $80 = 3Q^2 - 50Q + 200$. The quadratic formula gives 2 solutions this problem. Q1=13.76, Q2=2.91. 2nd order conditions verify that Q1 is the maximum. This Q is higher than the optimal Q in question 10 of 13.29. Qd at this price would be 59.375 - 0.5*80 = 19.375. So there would be a shortage. See if you can tell from the diagram below at what prices the monopolist would produce less and at what prices the monopolist would go out of business.