20. Incorrect. The answer is false not true. Q is correct but Ps and Pd are inverted. One way to solve is to invert demand and supply and set Pd + sb = Ps. Pd = 49 - 0.5Q + 4 = Ps = 5 + 0.25Q => Q = 64. Demand price is Pd = 49 - 0.5*64 = 17 and supply price is 5 + 0.25*64 = 21.

A faster way to solve this would be to substitute for Pd - sb = Ps into the supply equation and solve for equilibrium Qd = 98 - 2Pd = Qs = -20 + 4(Pd + 4) => Pd = 17. Then Ps = Pd + sb = 17 + 4 = 21 and Q = 98 - 2*17 = 64 or Q = -20 + 4*23 = 64.