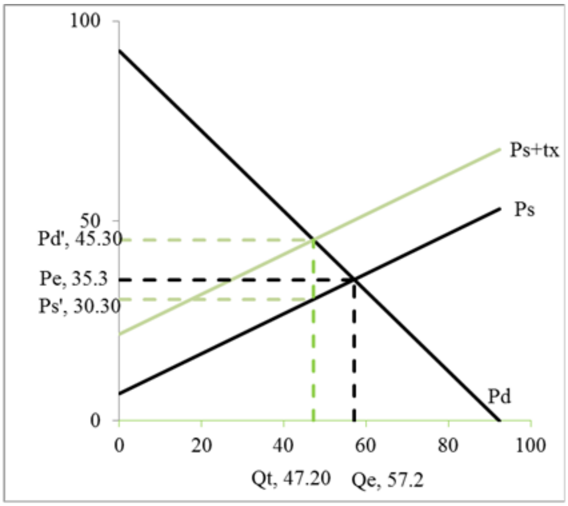
8. Incorrect. The answer is true not false. From question 7, equilibrium price and quantity were solved to be Pe=35.3 and Qe = 57.2. To compute incidence of the tax, first solve for inverse demand, P_d=92.5-Q_d, and supply P_s=6.7 + 0.5Q_s. Then set $P_s + t = P_d$. Solve for equilibrium Q from $P_s = 6.7 + 0.5Q + 15 = P_d = 92.5 - Q$. =>1.5Q = 70.8. Equilibrium Q = 47.2. At equilibrium Q, $P_d = 92.5 - 47.2 = 45.3$. $P_s = 6.7 + 0.5(47.2) = 30.3$. Consumer price went from 45.3 to 37.3 for an increase of $10 and producer price went from 35.3 to 30.3 for a decrease of $5. Total tax revenues are tax times sales of 15*47.2 = $708.



A quicker but less intuitive way to solve for the effect of a tax when you have direct demand curves is to substitute $P_s + t$ for P_d and solve as follows.

$Q_d = 92.5 - 1(P_s + 15) = Q_s = -13.4 + 2P_s$

$92.5 + 13.4 - 15 = 1P_s + 2P_s$

$90.9 = 3P_s$

$P_s = 90.0/3 = 30.3$

$P_d = P_s + 15 = 45.3$

$Q = Q_d = 92.5 - 1(45.3) = 47.2$

or $Q = Q_s = -13.4 + 2*30.3 = 47.2$