

**26. Incorrect. The answer is false not true.** Setting the standard of 18, we find the area of triangles and the social losses for Denver is 13.5 and 9 for Golden for a total of 22.5.

Denver's optimum is to the left of the standard and its losses are

$$\begin{aligned}
 &= \int_{15}^{18} MC_D dQ - \int_{15}^{18} MB dQ \\
 &= \int_{15}^{18} (-14 + 2Q) dQ - \int_{15}^{18} (30 - Q) dQ \\
 &= [-14Q + Q^2]_{15}^{18} - [30Q - (1/2)Q^2]_{15}^{18} \\
 &= [-14*18 + (18)^2 - (-14*15 + (15)^2)] - \\
 &\quad [30 - (1/2)18^2] - (30 - (1/2)15^2) \\
 &= 13.5
 \end{aligned}$$

Golden's optimum is to the right of the standard and its losses are

$$\begin{aligned}
 &= \int_{18}^{21} MB dQ - \int_{18}^{21} MC_G dQ \\
 &= \int_{18}^{21} (30 - Q) dQ - \int_{18}^{21} (-12 + Q) dQ \\
 &= [40Q - (1/2)Q^2]_{18}^{21} - [-12Q + (1/2)Q^2]_{18}^{21} \\
 &= 9
 \end{aligned}$$

