4.

(A)

FJAMR=MC

$$(\sigma v - 2q = 20)$$
 $2q = 80$
 $4 = 40$, $p^* = 80$
 $V = TR - TC = 80 \times 40 - (30 + 20 \times 40)$
 $= 3200 - 830$
 $= 2370$

(B)

 $1 = P - MC = 100 - 9 - 20$
 $E_J = 1 - J M Q = P = J Q \times P$
 $P = 4MR$