3. 利用 $MR=MC$，$120-2q=4q$，$q^*=20$ $P^*=100$

$TV=TR-TC$

$=100\times20-2\times20^2$

$=1200$

$$\varepsilon_d=\left|-\frac{d\ln Q}{d\ln P}\right|=\frac{P}{Q}=\frac{dQ}{dP}\times\frac{P}{Q}$$

$$=\frac{P}{Q}\times\frac{1}{\text{斜率}}=\frac{dP}{dQ}$$

$$=\left|\frac{100}{20}\times-1\right|$$

$=5$

$$L=\frac{P-MC}{P}=\frac{1}{|\varepsilon_d|}$$

$P=120-Q$

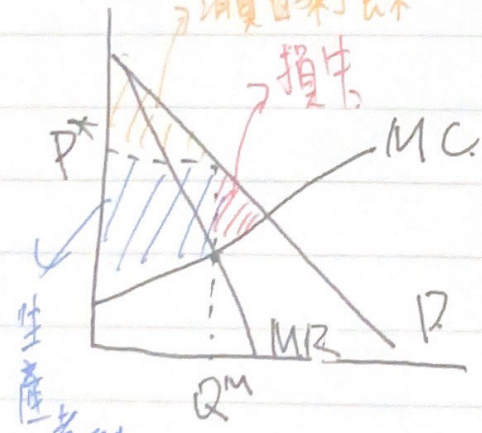
$TC=2q^2$

$P=MC$

$120-Q=4Q$

$q^*=24$ $TV=TR-TC$

$P^*=96$ $=1152$




$MC=4q=4\times20=80$

$4q=120-Q$

$q=24$

$=\frac{(100-80)\times(24-20)}{2}$

$=40$