

$$T4: \because q = 10L^{0.5}K^{0.5}$$

$$\textcircled{1} \quad \frac{MP_L}{MP_K} = \frac{w}{r} = \frac{1}{1} = 1$$

$$\Rightarrow K^* = L^* = 0.1q$$

$$\left[ q = \frac{q^2}{100K} \right]$$

$$\therefore STC = wL + r\bar{K} = \underline{q + 10K} + \frac{q^2}{10K} + 10K$$

$$TVC = wL = q$$

$$MC = \frac{\Delta STC}{\Delta q} = \frac{\Delta TVC}{\Delta q}$$

$$\star L = \frac{q^2}{100K}$$

$$\textcircled{2} \quad \because STC = TVC + TFC$$

$$= r\bar{K} + wL$$

T7:

$$\textcircled{1} AFC = \frac{FC}{q} = \frac{50}{10} = 5$$

$$\textcircled{2} AVC = q^2 - 12q + 1$$

$$\frac{dAVC}{dq} \Rightarrow 2q - 12 = 0 \Rightarrow q = 6$$

$\textcircled{3}$  当  $q > 6$  时,  $APL$  开始递减

$$\textcircled{4} MC = 3q^2 - 24q + 1$$

$$\frac{dMC}{dq} \Rightarrow 6q - 24 = 0 \Rightarrow q = 4$$

当  $q > 4$  时,  $MP_L$  开始递减。

