Week 6 A107260083 戴佳宇

5. $AC - AVC = AFC = 10$

$FC = AFC \times q$

6. $VC(q) = \int_0^{10} 10q\,dq = 5q^2\Big|_0^{10} = 500$

$TC = VC + FC = 500 + 100 = 600$

7. (A) $AFC = \frac{FC}{q} = \frac{50}{10} = 5$

(B) $AVC = q^2 - 12q + 1 \Rightarrow dAVC/dq = 2q - 12 \geq$

(C) $AVC \downarrow \rightarrow AP_L \downarrow \quad q \geq 6$

(D) $MC \downarrow \rightarrow MP_L \downarrow$

$\Rightarrow MC = 3q^2 - 24q + 1 \quad \frac{dMC}{dq} = 6q - 24$

$\Rightarrow q \geq 4$