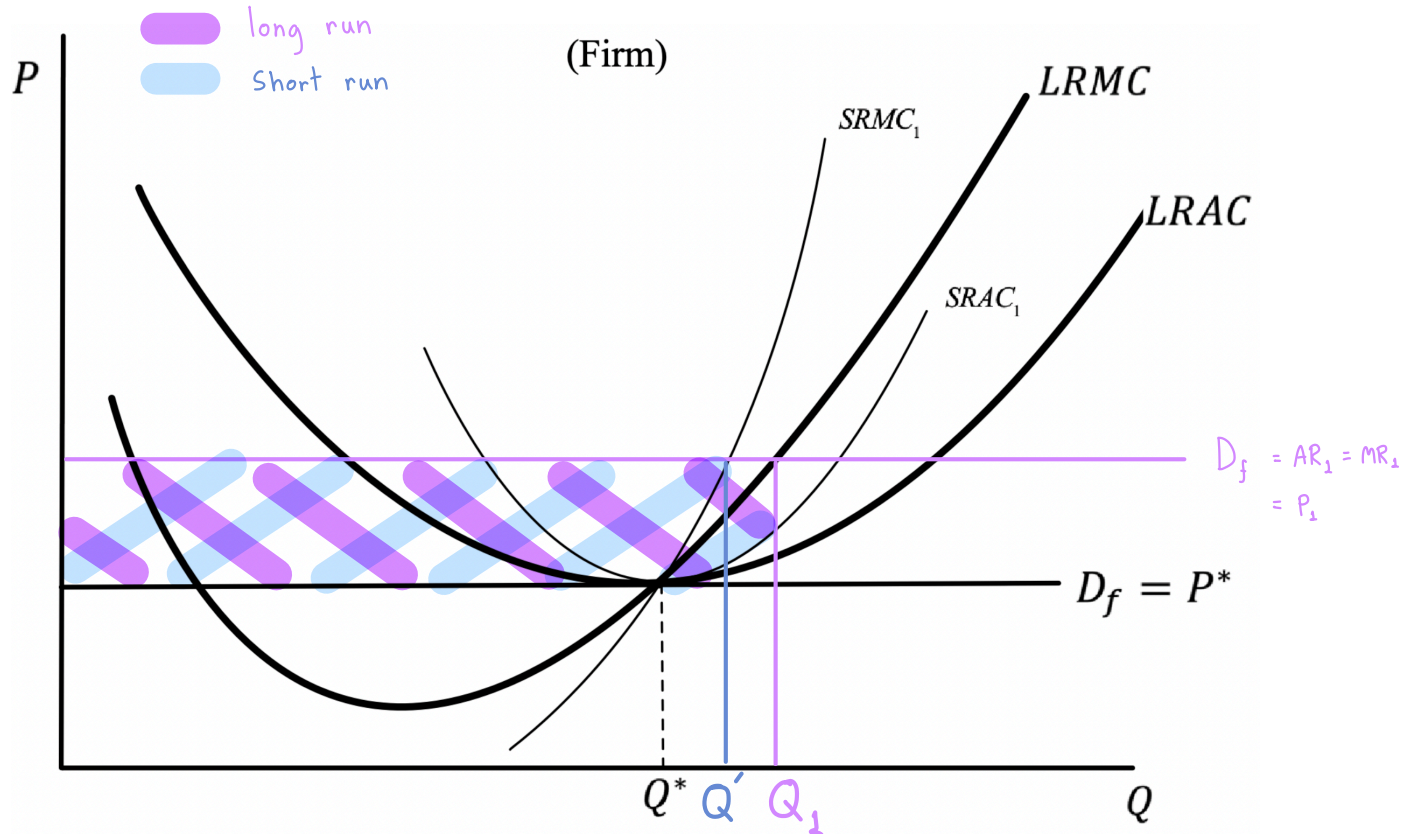


**HW#16**

Suppose that the market is in a Long-Run equilibrium where the price is at  $P^*$  and each firm produces  $Q^*$ . With the given  $SRMC_1$  and  $SRAC_1$  and  $LRMC$  and  $LRAC$ , the market price increases from  $P^*$  to  $P_1$ ,

- Show how the firm will change its output in Short Run and Long Run.
- Indicate the profit the firm receives in Short Run and Long Run.
- Explain why the profit in Long Run is bigger than profit in Short Run.



- SR : Output from  $Q^*$  to  $Q'$  (increase)

- LR : Output from  $Q^*$  to  $Q_1$  (increase)

LR's profit > SR's profit

because : firm has fixed input in SR (able/potential) to produce to just  $Q'$   
On the other hand, in LR, the firm can change any input, leading to be able to produce at  $Q_1$  ( $Q_1 > Q'$ )

$\therefore$  increase in production = higher cost

However, the cost is not too much comparing to the profit gained by the firm.