CONCEPT: SHORT RUN SHUTDOWN DECISION

● A firm might decide to shut down in the short-run due to the current market conditions (i.e. market price, cost levels).

- ☐ When a firm ***shuts down***, they produce no output ________________
- ☐ When a firm ***exits*** the market, they produce no output ______________

● The relevant costs in a short-run shutdown decision are ______________________

- ☐ In the short-run, fixed costs must remain fixed costs
- ☐ A ***sunk cost*** is a cost that ____________ be recovered
  - - No refunds
  - - Contractually committed

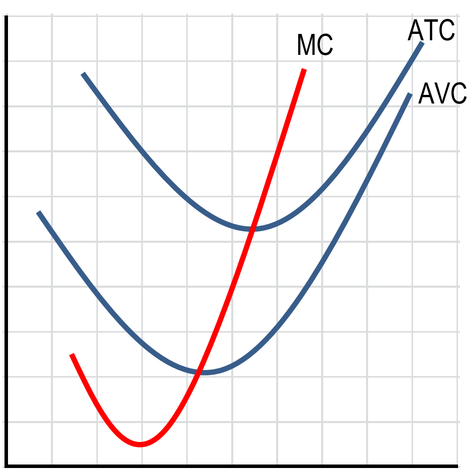
EXAMPLE: A farmer paid $1,000 to rent a field for the season. Seeds cost $200. Should the farmer produce this season?

Revenue from sales = $500		Revenue from sales = $100	
No Production:	Production:	No Production:	Production:
Best Scenario:		Best Scenario:	

● The firm shuts down if price falls below the ________________ of the __________ curve.

- ☐ The minimum of the AVC curve is called the ***shutdown point***

Shutdown if: $TR < VC$	Divide by Q:	Shutdown if:



Summary of Short Run Output and Profit		
Should firm produce?	Yes, if P > AVC	No, if P < AVC
If yes, what quantity?	Produce where MR = MC	
Economic profit?	Yes, if P > ATC	No, if P < ATC

● The AVC is only relevant for our short-run shutdown decision!

PRACTICE: The makers of edible underpants are faced with the following production costs:

Quantity	Total Fixed Costs	Total Variable Costs
0	100	0
1	100	50
2	100	70
3	100	90
4	100	140
5	100	200

The price for a pair of edible underpants is $50. In the short-run, the firm should:

a) Shut down because price is less than average total cost.
b) Shut down because it cannot make a profit.
c) Produce one unit because, at this output, marginal revenue equals marginal cost.
d) Produce four units because, at this output, the loss is minimized.

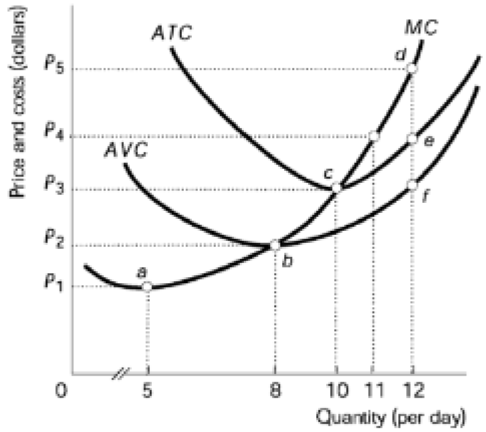
The price for a pair of edible underpants is $50. In the short-run, the firm's total revenue is:

a) $0
b) $50
c) $200
d) None of the above

The price for a pair of edible underpants is $50. In the short-run, the firm's profit (or loss) is:

a) $200 profit
b) $40 loss
c) $100 loss
d) Break-even

PRACTICE: Use this graph to answer the following questions:



The firm shuts down at any price below:

a) P_1
b) P_2
c) P_3
d) P_4

What is the least amount of output, assuming the firm does not shut down?

a) 5 units
b) 8 units
c) 10 units
d) 11 units

If the price falls from P_4 to P_3, then output will decrease by

a) 0 units
b) 1 unit
c) 2 units
d) 3 units