1. In general, if the price of a fixed factor of production increases,
A. price falls.
B. marginal costs are unchanged.
C. marginal costs increase.
D. average total costs remain unchanged.

Employee hours per day	Output per day	Output price	Hourly wage rate	Rent
0	0	$2	$14	$50
1	40	$2	$14	$50
4	80	$2	$14	$50
9	120	$2	$14	$50
15	160	$2	$14	$50
23	200	$2	$14	$50

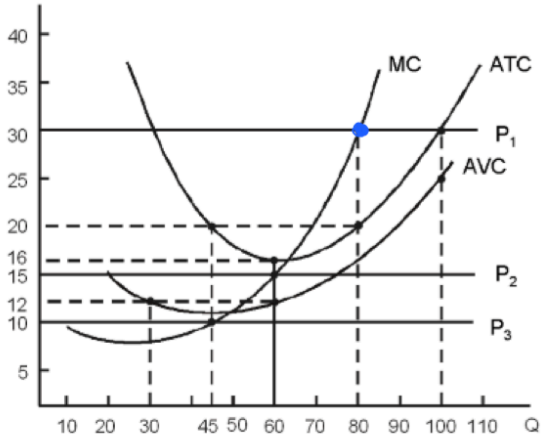
2. Refer to the figure above. Fixed cost for this firm is
A. $66
B. $64
C. $50
D. $14

3. Refer to the figure above. The firm earns a _____ of _____ when it produces 120 units of output.
A. loss; $64
B. profit; $64
C. loss; $114
D. profit; $114

4. A firm's output price is $8 and the firm is producing 77 units with a marginal cost of $11. The firm should
A. lower its price.
B. decrease production.
C. increase production.
D. raise its price.

P < MC

5. Refer to the figure above. What is the marginal cost of the 9th employee hour?
A. $126
B. $14
C. $50
D. $48



Shortrun Shutdown Condition
P < min. Val. of AVC
or P x Q < VC
Long-run = no fixed costs

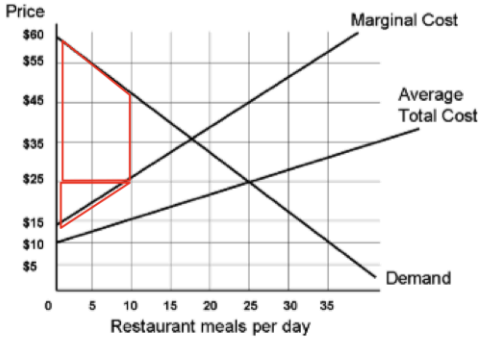
6. Refer to the figure above. When the demand is P_1 = $30, what is the total revenue?
A. $ 900
B. $1350
C. $800
D. $2400

7. Refer to the figure above. When the demand is P_1 = $30, how much profit is this producer earning?
A. $ 500
B. $ 800
C. $ 1200
D. $ 1600

8. Does the graph above represent the firm's short run equilibrium or long run equilibrium, for a given price?
A. short run
B. long run
C. short run or long run
D. neither short run nor long run

9. Refer to the figure above. When the demand is P_2 = \$15, this firm should _____
A. continue to operate in the short run and think about shutting down in the long run
B. discontinue operation in the short run since there is a loss when operating.
C. keep operating as long as loss is not greater than total cost
D. discontinue operation in the short run since average total cost is greater than price.

10. Refer to the figure above. When the demand is P_2 = \$10, this firm should _____
A. continue to operate in the short run and think about shutting down in the long run
B. discontinue operation in the short run since the firm is unable to cover variable costs.
C. keep operating as long as loss is not greater than total cost
D. discontinue operation in the short run since average total cost is greater than price.



11. Refer to the figure above. At a price of \$35, producer surplus is approximately

A. \$350

B. \$120

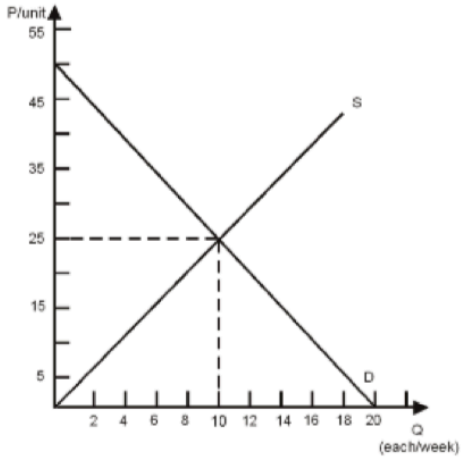
C. \$150

D. \$180

$\frac{20(17)}{2} = 180$

12. Refer to the figure above. Suppose a law is passed requiring restaurants to charge no more than $25 per meal. This law would

A. decrease both producer and consumer surplus by forcing restaurants to shut down.
B. unambiguously increase consumer surplus and not change producer surplus.
C. drive producer surplus to zero and maximize consumer surplus
D. unambiguously reduce producer surplus, but not force restaurants to shut down.



13. Refer to the figure above. Total producer surplus received by the seller is

A. $100
B. $125
C. $200
D. $625

John is trying to decide how to divide his time between his job as a stocker in the local grocery store, which pays $7/hr for as many hours as he chooses to work, and cleaning windows for the businesses in downtown. He makes $2 for every window he cleans. John is indifferent between the two tasks, and the number of windows he can clean depends on how many hours he cleans a day, as shown in the table below:

Cleaning time (hr/day)	Total numbers of windows cleaned
0	0
1	7
2	11
3	14
4	16
5	17

M B
7
8
6
2

14. Does the 3rd hour cleaning satisfy the cost-benefit principle? No

A. yes, since he makes $28

B. yes, since the additional amount earned is $14

C. no, since the additional amount earned is $6

D. yes, since the additional amount earned is $6.

15. What is John's reservation price for 4th and 5th hours of cleaning windows?

A. $7 and $7.5 respectively

B. $2 and $3.5 respectively

C. $3.5 and $7 respectively

D. $11 and $14 respectively

16 - 14 = 2

17 - 16 = 1

$\frac{7}{2} = 3.5$

$\frac{7}{1} = 7$