Questions on the topic **Output and Cost** are provided below.

Multiple Choice Questions

1.

Q	MC($)	TVC($)	TFC($)
0	--	0	100
1	182	182	100
2	158	340	100
3	152	492	100
4	164	656	100
5	194	850	100
6	242	1092	100
7	308	1400	100
8	392	1792	100

Over what range of quantities does this firm experience increasing marginal product?

A. up to the 3rd unit of output

B. Between 4th and 5th units of output

C. Between 6th and 8th units of output

D. Over none of the outputs

2. Which is not a fixed cost?

A. Monthly rent of $1000 contractually specified in a one-year lease
B. An insurance premium of $50 per year, paid last month
C. An attorney's retainer of $50,000 per year
D. A worker's wage of $15 per hour

3. The reason why marginal cost curve eventually increases as the output increases for a typical firm is because-

A. Of Diseconomies of Scale
B. Of Minimum Efficient Scale
C. Of the Law of Diminishing Returns
D. Normal profit exceeds Economic profit

4. With fixed costs of $400, a firm has an average total cost of $3 and average variable cost of $2.50. Its output is-

A. 200 units
B. 400 units
C. 800 units
D. 1600 units

Math Questions

1. Please fill up this box for a firm's daily production plan:

L	Q	MP	TC	MC	TFC	AFC	TVC	AVC
1	23	23			70		600	
2	55	32						
3	94	39						
4	120	26						
5	142	22						
6	149	7						

2. Calculate the average product and marginal product for the information provided in the table:

Input of the variable factor Total Product (labor)	Total Product	Average Product	Marginal Product
0	0		
1	21		
2	58		
3	68		

3. Fill in the table below:

Quantity of Cars	TC	VC	MC	AVC	ATC	AFC
0	500,000					
1	540,000					
2	560,000					
3	570,000					
4	590,000					
5	620,000					
6	660,000					
7	720,000					
8	800,000					
9	920,000					
10	1,100,000					

4. Bill's bakery has a fire and Bill loses some of his cost data. The bits of paper that he recovers after the fire provide the data in the following table (all the cost numbers are euros).

TP	AFC	AVC	ATC	MC
10	120	100	220	0
20	A	B	150	80
30	40	90	130	90
40	30	C	D	130
50	24	108	132	E

Calculate the missing cost data identified as A,B,C,D and E from the table provided above.

Solutions

McQs

1. A
2. D
3. C
4. C

Maths Solutions

1.

L	Q	MP	TC	MC	TFC	AFC	TVC	AVC
1	23	23	670		70	3.04	600	26.09
2	55	32	1270	18.75	70	1.27	1200	21.82
3	94	39	1870	15.38	70	0.74	1800	19.15
4	120	26	2470	23.08	70	0.58	2400	20
5	142	22	3070	27.27	70	0.49	3000	21.13
6	149	7	3670	85.71	70	0.47	3600	24.16

TC=TFC+TVC

MC=change in TC/change in Q

TFC=70

TVC=600*L

AVC=TVC/Q

AFC=TFC/Q

2.

Input of the variable factor Total Product (labor)	Total Product	Average Product	Marginal Product
0	0		
1	21	21	21
2	58	29	37

3	68	22.67	10