UNIVERSITY OF ASIA PACIFIC

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING(CSE)

Course Title: Engineering Economics

Course Code: ECN 201

Assignment No: 02

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Sec: E

Submitted To,

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Lecturer (BS& H,UAP)

a) Find out FC, VC, MC, AC, AR and MR

Soln: Given that,

Quantity = Q

Total revenue = TR

Total Cost = TC

Profit = P

Determine fixed cost (FC) do not vary with the quantity of output produced. So, In the beginning when firm has produced nothing, that time total cost = 62 which is fixed cost.

So, FC = 62

we know, Variable Cost (VC) = TC - FC

Marginal cost (MC) = $\frac{\Delta TC}{\Delta Q}$

Average Cost (AC/ATC) = $\frac{TC}{Q}$

Average revenue (AR) = $\frac{TR}{Q}$

Marginal Revenue (MR) = $\frac{\Delta TR}{\Delta Q}$

Δ = changes betweens cost

TC = Total cost

TR = Total revenue

ΔQ = quantity changes

Constructing table with TR, TC, Profit, FC, VC, MC, AC, AR

Q	TR($)	TC($)	Profit ($)	FC($)	VC =TC-FC	MC =ΔTC/ΔQ	AC = TC/Q	AR =TR/Q	MR =TR/ΔQ
0	$0	$62	-62	62	0	-	-	-	-
10	$40	90	-50	62	28	$2.8	$9.0	$4.0	$4.0
20	$80	110	-30	62	48	$2.0	$5.5	$4.0	$4.0
30	$120	126	-6	62	64	1.6	4.2	4.0	4.0
40	$160	138	22	62	76	1.2	3.45	4.0	4.0
50	$200	150	50	62	88	1.2	3.00	4.0	4.0
60	$240	165	75	62	103	1.5	2.75	4.0	4.0
70	$280	190	90	62	128	2.5	2.71	4.0	4.0
80	$320	230	90	62	168	4.0	2.88	4.0	4.0
90	$360	296	64	62	234	6.6	3.29	4.0	4.0
100	$400	400	0	62	338	10.4	4.00	4.0	4.0
110	$440	550	110	62	488	15	5.00	4.0	4.0
120	$480	715	235	62	653	16.5	5.96	4.0	4.0

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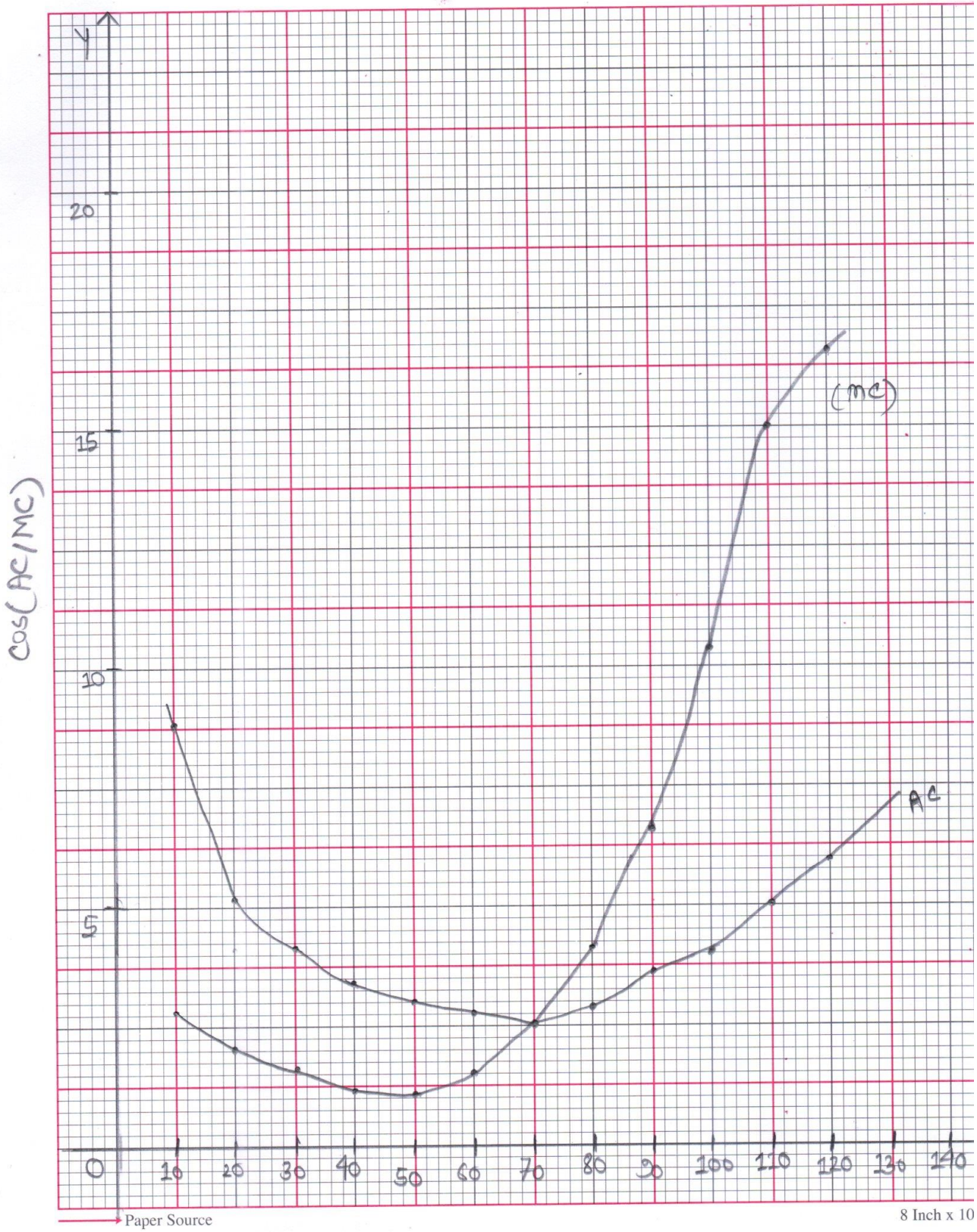

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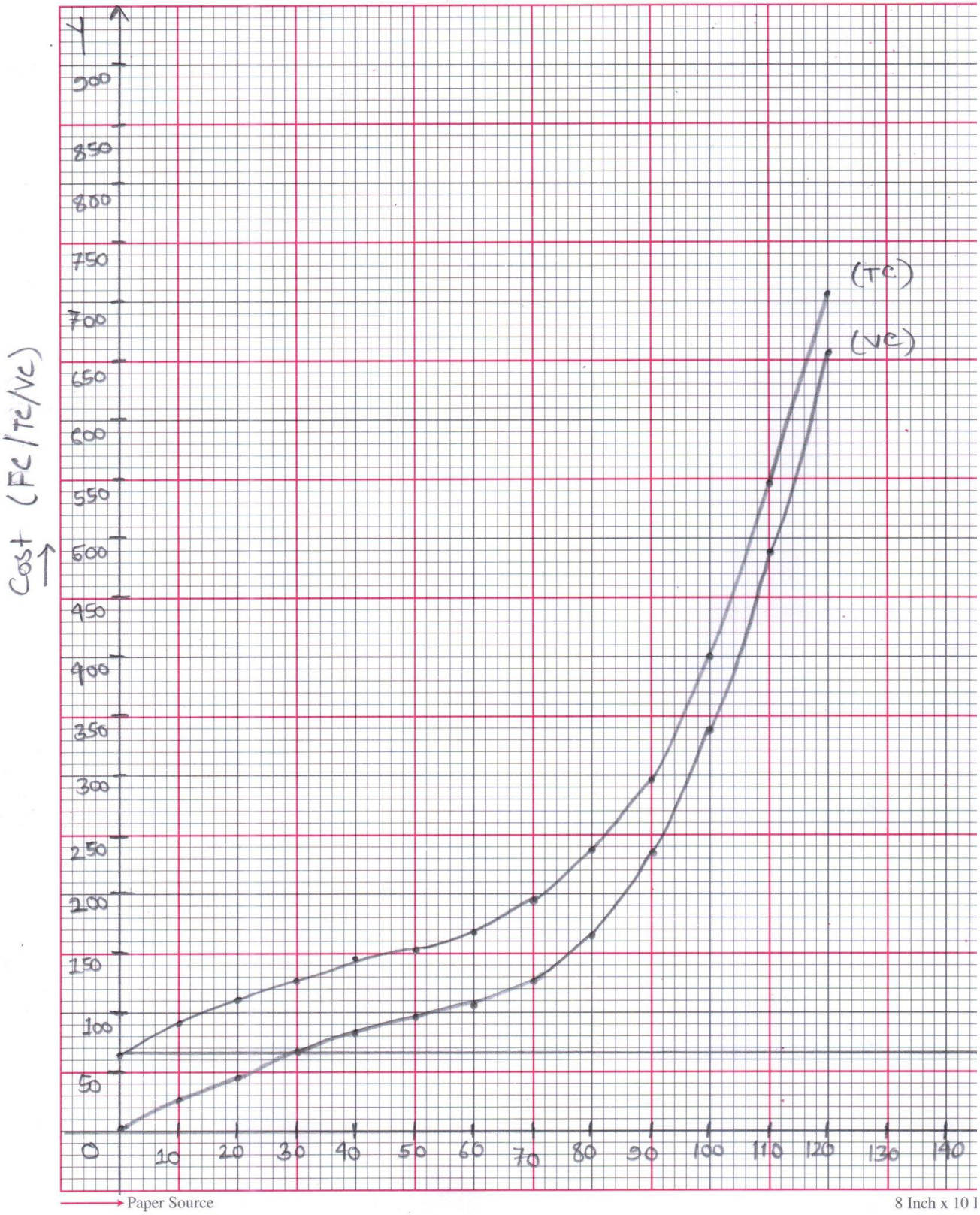

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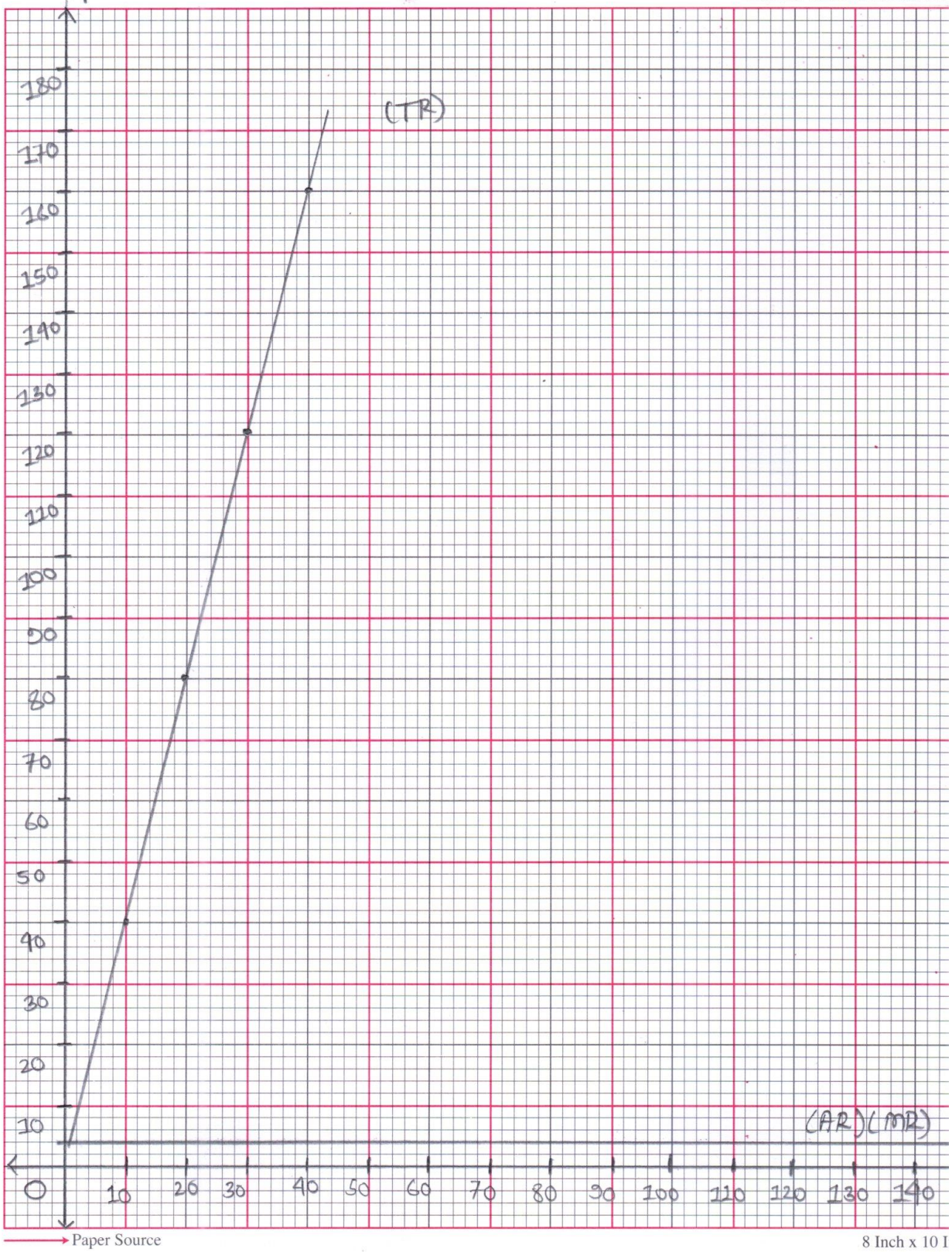

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