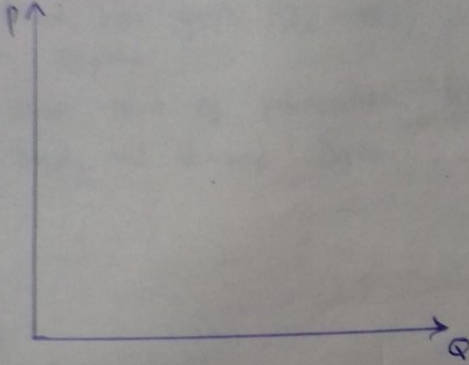


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CONFERENCE
NOTES

1)

2)



Q	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
P	82	77.5	73	68.5	64	59.5	55	50.5	46	41.5	37	32.5	28	23.5	19	14.5	10

Demand: $P = 100 - 4.5Q$

Q	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
P	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105

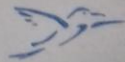
Supply: $P = 5 + 5Q$

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NOTES

b) = 6

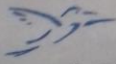
c) Check kwan graph ($Q_s - Q_d$) at $P = 82$. It's
a surplus.

d) Check point of intersection between the
supply and demand curve.

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CONFERENCE NOTES

Q2)

$$5M + 4.5C = 20$$

when $C = 0$

$$5M = 20$$

$$M = \frac{20}{5} = 4$$

when $M = 0$

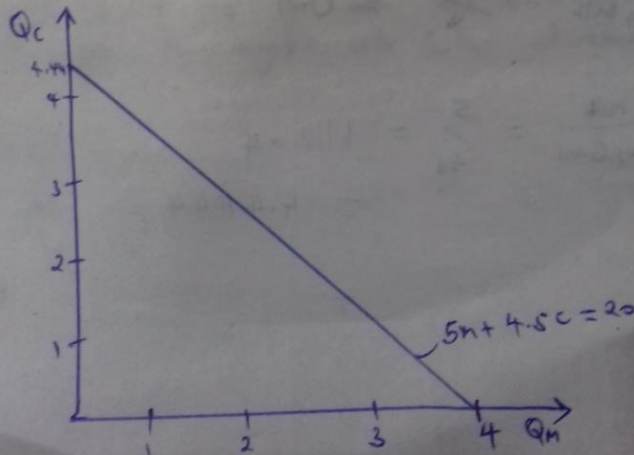
$$4.5C = 20$$

$$C = \frac{20}{4.5}$$

$$C = 4.44$$

M - milk

C - cereal



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b) The most you can purchase of cereal is the
y-intercept. 4.44

c) $5M + 4.5C = 20$

$5(3) + 4.5C = 20$

$4.5C = 20 - 15$

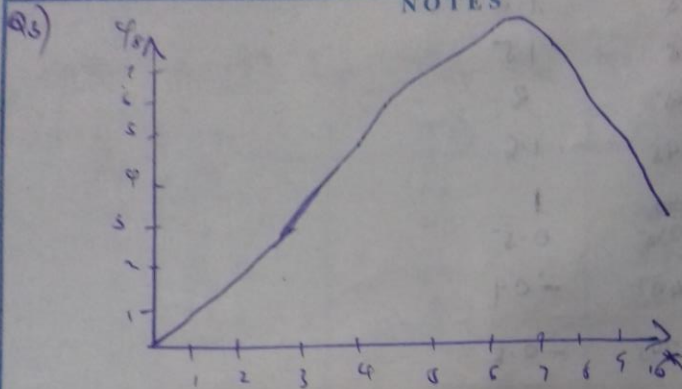
$4.5C = 5$

$C = \frac{5}{4.5} = 1.11$

d) slope = $\frac{\Delta Q_C}{\Delta Q_M} = \frac{4.44 - 0}{0 - 4} = -\frac{4.44}{4} = -1.1111$

e) $\frac{\text{Cost of Cereal}}{\text{Cost of Milk}} = \frac{4.5}{5} = 0.9$

f) $\frac{\text{Cost of Milk}}{\text{Cost of Cereal}} = \frac{5}{4.5} = 1.1111 \times 4$
 $= 4.4444$



3) The orientation of causation is positive until the point when x is 7 then the orientation starts to be negative with further increase in x .

$$c) \frac{dy}{dx} = \frac{3.145 - 1.545}{3 - 2} = 1.5$$

The magnitude of causation between point $x=2$ & $x=3$ is 1.5.

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d)

	0	0 Impact
1	0.445	0.445
2	1.645	1.2
3	3.145	1.5
4	5.145	2
5	6.745	1.6
6	7.745	1
7	8.245	0.5
8	8.145	-0.1
9	7.345	-0.8
10	5.945	-1.4

The impact on Y increases as units of X increase up to the point when $X = 4$ then the impact starts to reduce. At $X = 8$ the impact becomes negative and extra units of X cause Y to reduce.

CONFERENCE
NOTES

Q4)

a) At the 7th hour when the MC is \$20.11

b)

Q	TC	TB	NB = TB - TC
0	0	0	0
1	5.00	20	15
2	14.33	40	25.67
3	26.54	60	33.46
4	41.1	80	38.9
5	57.7	100	42.3
6	76.13	120	43.87
7	96.24	140	43.76
8	117.9	160	42.1
9	141.02	180	38.98
10	165.52	200	34.48
11	191.33	220	28.67
12	218.39	240	21.61
13	246.65	260	13.35
14	276.06	280	3.94
15	306.58	300	-6.58
16	338.18	320	-18.18

c) Hour 6 maximises NB. It is at 43.87

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9c)

$$\pi = TR - TC$$

$$TC = VC + FC$$

$$FC = 5000 + 2000 + 10,000 + 5000$$

$$= 22,000$$

$$VC = 12Q + 6000L$$

$$TR = 26.5Q$$

$$\pi = 26.5Q - (22,000 + 12Q + 6000L)$$

$$= 26.5Q - 22,000 - 12Q - 6000L$$

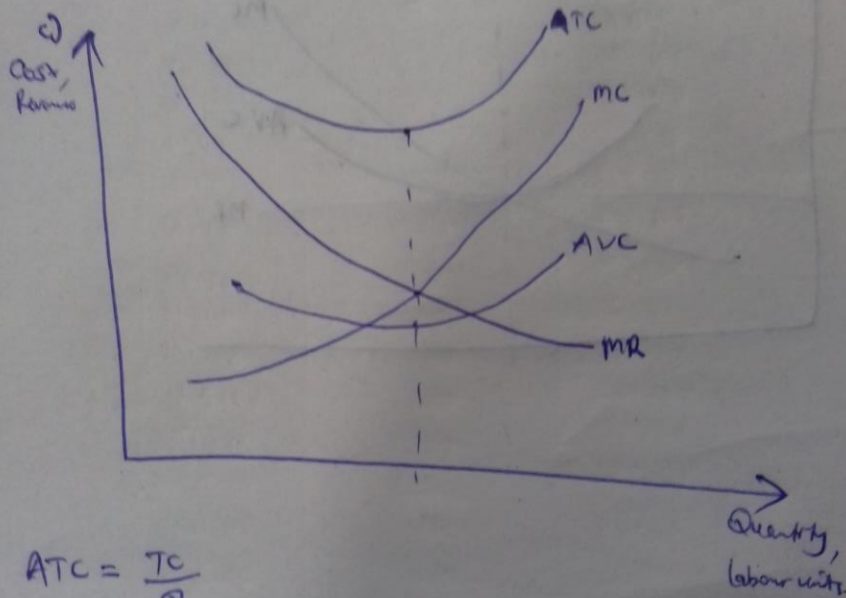
L	Q	VC	FC	TR	π
0	0	0	0	0	0
1	374	10,488	22,000	9911	-22,577
2	1000.8	24,009.6	22,000	26,521.2	-19,488.4
3	1761.8	39,141.6	22,000	46,687.7	-14,453.9
4	2589.08	55,068.96	22,000	68,610.62	-8,458.34
5	3427.1	71,125.2	22,000	90,818.15	-2,307.05
6	4226.66	86,719.92	22,000	112,006.49	3,286.57
7	5028.13 4941.62	101,299.44	22,000	139,952.93	7,653.49
8	5528.13	114,337.56	22,000	146,495.45	10,157.885
9	5943.72	125,324.64	22,000	157,508.58	10,183.94
10	6147.00	133,764	22,000	162,895.5	7,131.5

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CONFERENCE NOTES

a) 5943.72 Qns

W \$10,183.94



$$ATC = \frac{TC}{Q}$$

$$AVC = \frac{VC}{Q}$$

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