Marginal Product

50/10 = 5
70/10 = 7
90/10 = 9
120/10 = 12
140/10 = 14
160/10 = 16
150/10 = 15
130/10 = 13
110/10 = 11
80/10 = 8
50/10 = 5
20/10 = 2
- 20/10 = - 2
- 50/10 = -5
- 80/10 = -8
- 110/10 = -11
- 130/10 = -13

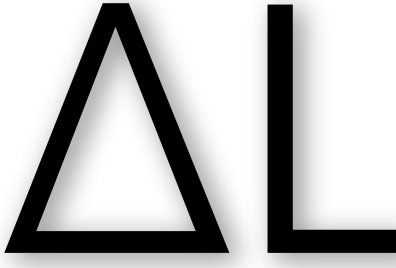
TP	Change in TP	Change in L
0		
50	50-0=50	10-0=10
120	120-50=70	20-10=10
210	210-120=90	30-20=10
330	330-210=120	40-30=10
470	470-330=140	50-40=10
630	630-470=160	60-50=10
780	780-630=150	70-60=10
910	910-780=130	80-70=10
1,020	1020-910=110	90-80=10
1,100	1100-1020=80	100-90=10
1,150	1150-1100=50	110-100=10
1,170	1170-1150=20	120-110=10
1,150	1150-1170=-20	130-120=10
1,100	1100-1150=-50	140-130=10
1,020	1020-1100=-80	150-140=10
910	910-1020=-110	160-150=10
780	780-910=-130	170-160=10

Labor
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170

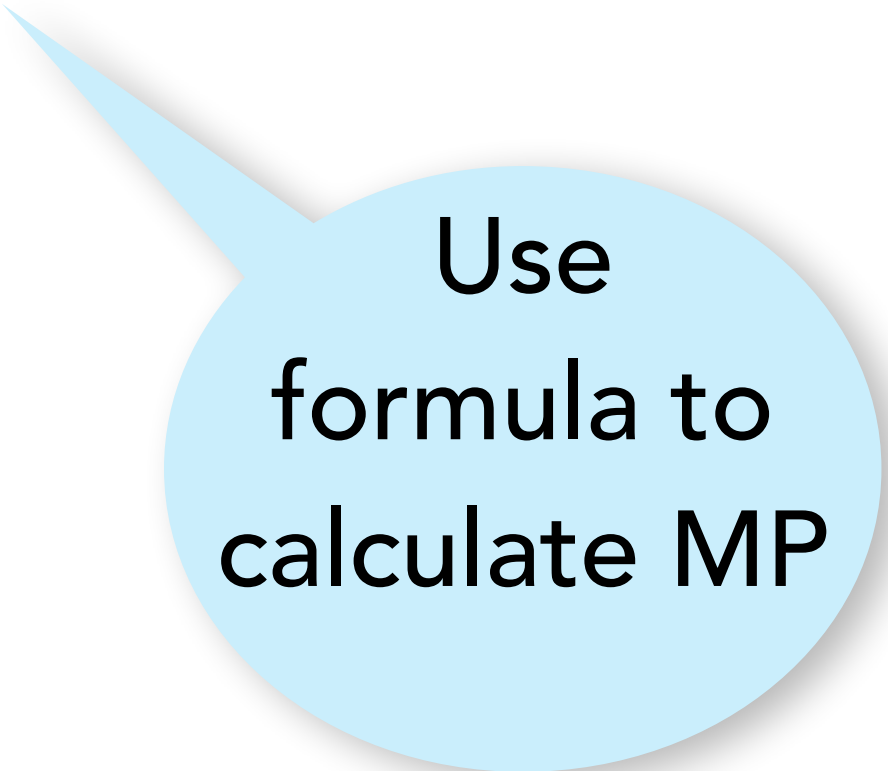
Leave Blank!

Labor increases in groups of 10 workers

$\Delta L = 10$

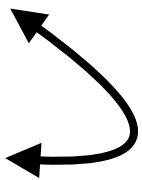



ΔTP


Use
formula to
calculate MP

$$MP = \frac{\Delta TP}{\Delta L}$$

Hiring
these 10 workers
(from 50 to 60)
increase TP by
160 units



The MP of **each one** of these 10 workers is 16 units

Labor	TP	Change in TP	Change in L	Marginal Product
0	0	ΔTP	ΔL	Leave Blank!
10	50	50-0=50	10-0=10	50/10 = 5
20	120	120-50=70	20-10=10	70/10 = 7
30	210	210-120=90	30-20=10	90/10 = 9
40	330	330-210=120	40-30=10	120/10 = 12
50	470	470-330=140	50-40=10	140/10 = 14
60	630	630-470=160	60-50=10	160/10 = 16
70	780	780-630=150	70-60=10	150/10 = 15
80	910	910-780=130	80-70=10	130/10 = 13
90	1,020	1020-910=110	90-80=10	110/10 = 11
100	1,100	1100-1020=80	100-90=10	80/10 = 8
110	1,150	1150-1100=50	110-100=10	50/10 = 5
120	1,170	1170-1150=20	120-110=10	20/10 = 2
130	1,150	1150-1170=-20	130-120=10	- 20/10 = - 2
140	1,100	1100-1150=-50	140-130=10	- 50/10 = -5
150	1,020	1020-1100=-80	150-140=10	- 80/10 = -8
160	910	910-1020=-110	160-150=10	- 110/10 = -11
170	780	780-910=-130	170-160=10	- 130/10 = -13

Labor increases in groups of 10 workers
$\Delta L = 10$

Hiring these 10 workers (from 50 to 60) increase TP by 160 units

$$MP = \frac{\Delta TP}{\Delta L}$$

Use formula to calculate MP

The MP of **each one** of these 10 workers is 16 units

The Average/Marginal Rule