Price of output = $30

How many machines should be purchased?

K	Total Product
0	0
1	632
2	896
3	1096
4	1264
5	1410
6	1550

Marginal Product of **K**

632 - 0

896 - 632

1096 - 896

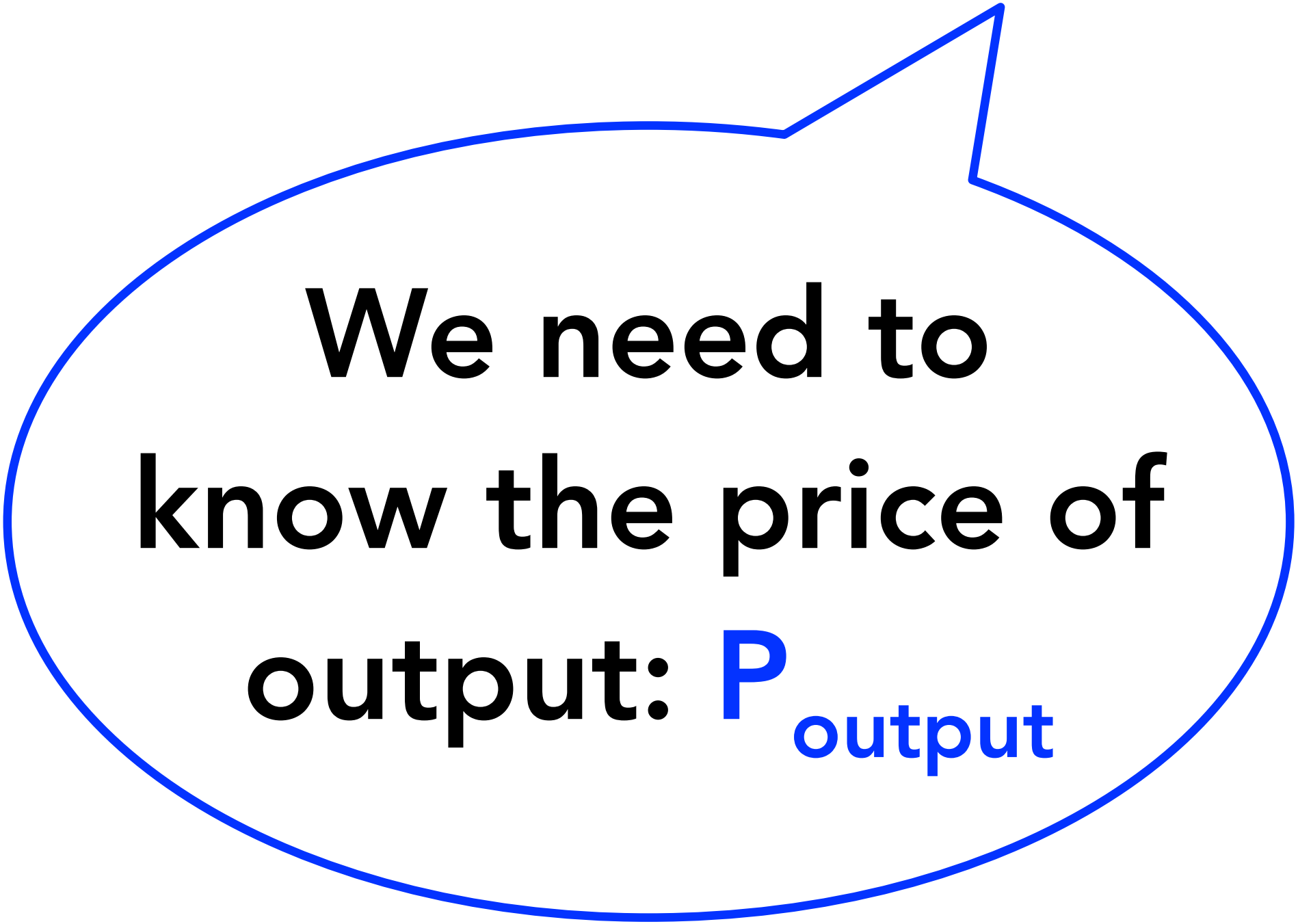
1264 - 1096

1410 - 1264

1550 - 1410

Marginal Product of K
632
264
200
168
146
140

First,
calculate the
MP_K


We need to
know the price of
output: P_{output}

$$MRP_K = MP_K \times P_{output}$$

Price of output is always given

Marginal Revenue Product

$MRP_K = MP_K \times P_{output}$

$= 632 \times \$30$

$= 264 \times \$30$

$= 200 \times \$30$

$= 168 \times \$30$

$= 146 \times \$30$

$= 140 \times \$30$


We need to calculate the MRP_K

Marginal Revenue Product
18,960
7,920
6,000
5,040
4,380
4,200


MP
K

MRP K

How many machines should be purchased?

K	Total Product	MP_K	MRP_K
0	0		
1	632	632	18,960
2	896	264	7,920
3	1096	200	6,000
4	1264	168	5,040
5	1410	146	4,380
6	1550	140	4,200

Price of output = $30

K	MP_K	MRP_K
0		
1	632	18,960
2	264	7,920
3	200	6,000
4	168	5,040
5	146	4,380
6	140	4,200