

[illegible]





2

3

4

5









10

1

1



15

30

50

6

7

8

2

5

95

107

125

1

3

1



Total Product

1

1

7



Wage
\$50

Assume that labor is
the ONLY variable cost
and the wage is \$50


1 worker = \$50

2 workers = \$1000


3 workers = \$150

Variable Cost

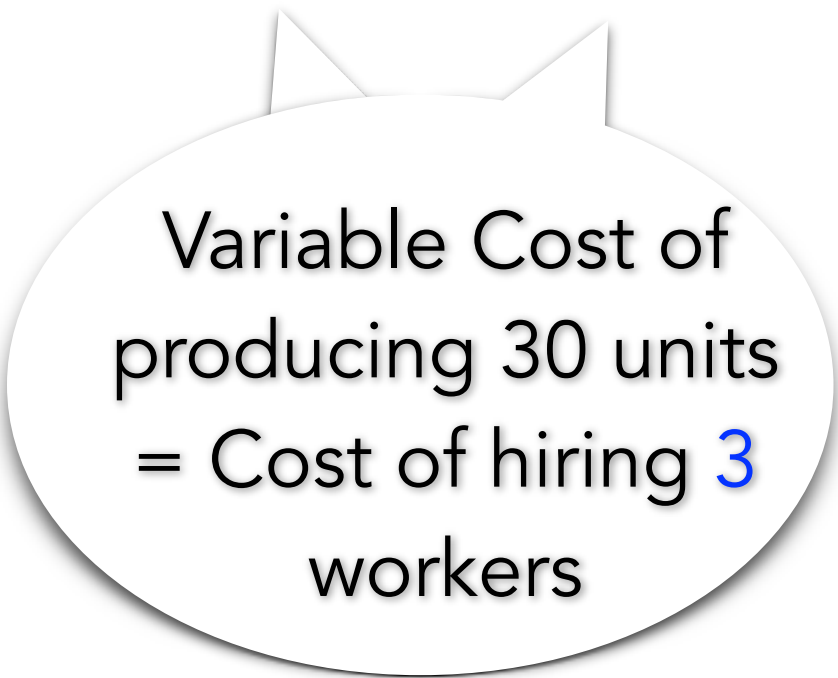
4 workers = \$2000



Variable Cost of
producing 5 units
= Cost of hiring
one worker



Variable Cost of
producing 15 units
= Cost of hiring
two workers



Variable Cost of
producing 30 units
= Cost of hiring 3
workers

Variable Cost

0

50

100

150

200

250

300

350

400

450

500

550

0workers=0

$$5 \text{ workers} = \$250$$

6 workers = \$3000

7 workers = \$350

$$8 \text{ workers} = \$4000$$

9 workers = \$450

10 workers = \$500

11 workers = \$550



From Production Function to the Cost Function

F

r



m

t

h

e

P

r



d

u

C

t

i



n

F

u

n

C

t

i



n

t



t

h

e

C



S

t

F

u

n

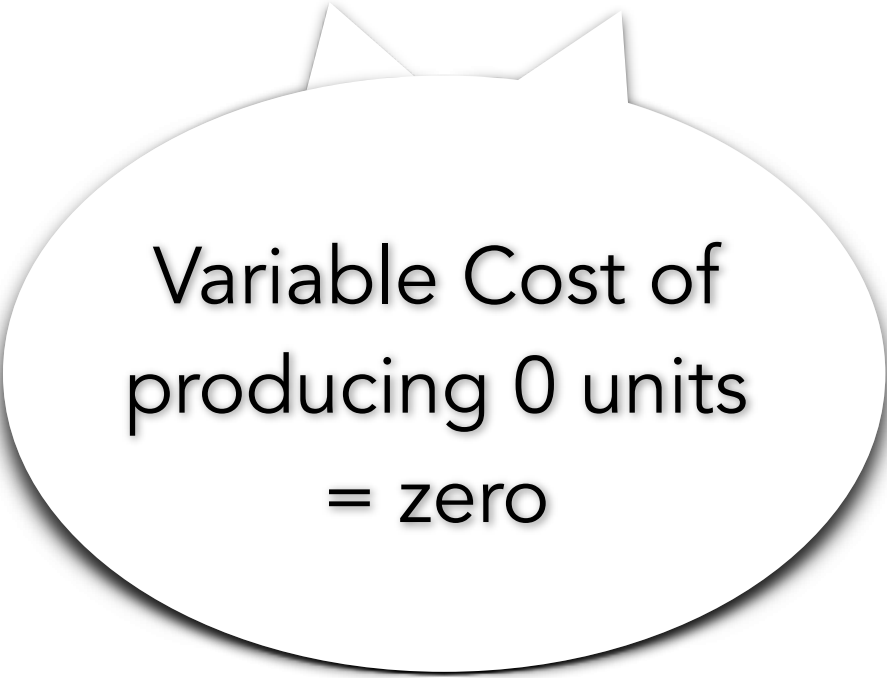
C

t

i



n



Variable Cost of
producing 0 units
= zero

From the Production Function to the Cost Function



From the **Production** Function to the **Cost** Function

Q	Variable Cost
0	0
5	50
15	100
30	150
50	200
67	250
82	300
95	350
107	400
117	450
125	500
131	550

Wage
\$50

Q
0
5
15
30
50
67
82
95
107
117
125
131

VC	
0	
50	
100	
150	
200	
250	
300	
350	
400	
450	
500	
550	