

Costs, revenues, and profits

Variable costs: costs for inputs that rise the more of a good you produce

To produce more wheat, you need more seed.

To produce more cars, you need more metal.

Costs, revenues, and profits

Variable costs – costs for inputs that rise the more of a good you produce

To produce more wheat, you need more seed.

To produce more cars, you need more metal.

Think of a good. Think of an input used for that good which must be increased the more of the good you produce.

Costs, revenues, and profits

Fixed costs – costs for inputs that stay the same regardless of how much you produce.

If you take out a loan to pay for a tractor-shed, that loan payment is the same regardless of how much wheat you produce.

Costs, revenues, and profits

Fixed costs: costs for inputs that stay the same regardless of how much you produce.

Think of a good. Think of a fixed cost for that input. On the blank sheet of paper, write down this good and that fixed cost.

Costs, revenues, and profits

Quantity produced	Variable cost of each unit	Price received for each unit	Revenues minus variable costs for each unit
1	3	5	$5 - 3 = 2$
2	4	5	$5 - 4 = 1$
3	8	5	$5 - 8 = -3$

How much should you produce?

Costs, revenues, and profits

Quantity produced	Variable cost of each unit	Price received for each unit	Revenues minus variable costs for each unit
1	3	5	$5 - 3 = 2$
2	4	5	$5 - 4 = 1$
3	8	5	$5 - 8 = -3$

How much should you produce?

Answer = 2 units. Revenues minus variable costs = 3

Fixed costs = \$2 no matter how much is produced

Quantity produced	Variable cost of each unit	Price received for each unit	Revenues minus variable costs for each unit
1	3	5	$5 - 3 = 2$
2	4	5	$5 - 4 = 1$
3	8	5	$5 - 8 = -3$

How much should you produce?

Answer = 2 units.

Revenues minus [all] costs = $(5-3) + (5-4) - 2$
 $= 2 + 1 - 2 = \$1$

Fixed costs = \$20 no matter how much is produced

Quantity produced	Variable cost of each unit	Price received for each unit	Revenues minus variable costs for each unit
1	3	5	$5 - 3 = 2$
2	4	5	$5 - 4 = 1$
3	8	5	$5 - 8 = -3$

How much should you produce?

Answer = 2 units.

Revenues minus costs = $(5-3) + (5-4) - 20$
 $= 2 + 1 - 20 = -\$17$

The point:

In the short-run, fixed costs are irrelevant.

As long as revenues exceed variable costs, you should produce something, even if profits are negative (because it reduces your losses, relative to producing nothing).