



Quadratic Equation Word Problem To Optimization (y) - Profit by Volume

1 Given this equation for the profit as a function of production volume, what is the maximum profit?

$$P(v) = -3v^2 + 10v + 2$$

A $P = 10.833v$

B $P = 10.333v$

C $P = 11.583v$

2 Given this equation for the profit as a function of production volume, what is the maximum profit?

$$P(v) = -7v^2 + 7v + 11$$

A $P = 12.5v$

B $P = 14.75v$

C $P = 12.75v$

3 Given this equation for the profit as a function of production volume, what is the maximum profit?

$$P(v) = -11v^2 + 6v + 10$$

A $P = 11.318v$

B $P = 10.818v$

C $P = 8.568v$

4 Given this equation for the profit as a function of production volume, what is the maximum profit?

$$P(v) = -4v^2 + 10v + 3$$

A $P = 9.25v$

B $P = 10.75v$

C $P = 9.75v$

5 Given this equation for the profit as a function of production volume, what is the maximum profit?

$$P(v) = -3v^2 + 4v + 11$$

A $P = 10.583v$

B $P = 11.583v$

C $P = 12.333v$

6 Given this equation for the profit as a function of production volume, what is the maximum profit?

$$P(v) = -8v^2 + 2v + 3$$

A $P = 0.875v$

B $P = 5.375v$

C $P = 3.125v$

7 Given this equation for the profit as a function of production volume, what is the maximum profit?

$$P(v) = -6v^2 + 4v + 3$$

A $P = 5.417v$

B $P = 3.667v$

C $P = 1.917v$

8 Given this equation for the profit as a function of production volume, what is the maximum profit?

$$P(v) = -2v^2 + 11v + 6$$

A $P = 18.125v$

B $P = 21.125v$