Name

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?

$$P(v) = -6v^2 + 10v + 8$$

A	$P = 12.167v$	B	$P = 13.167v$
C	$P = 15.167v$		

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

$$P(v) = -8v^2 + 7v + 9$$

A	$P = 9.531v$	B	$P = 7.531v$
C	$P = 10.531v$		

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

$$P(v) = -9v^2 + 2v + 5$$

A	$P = 9.111v$	B	$P = 5.111v$
C	$P = 0.111v$		

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

$$P(v) = -4v^2 + 7v + 5$$

A	$P = 11.063v$	B	$P = 5.063v$
C	$P = 8.063v$		

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

$$P(v) = -9v^2 + 9v + 7$$

A	$P = 10.25v$	B	$P = 13.25v$
C	$P = 9.25v$		

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

$$P(v) = -9v^2 + 10v + 6$$

A $P = 8.778v$	B $P = 11.778v$

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

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

A $P = 16.167v$	B $P = 11.167v$

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

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

A $P = 3.25v$	B $P = 8.25v$