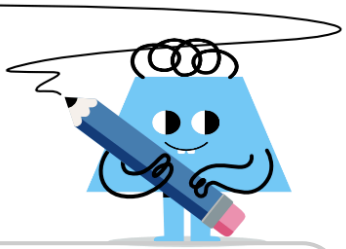
Name

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



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

$$P(v) = -5v^2 + 7v + 6$$

A	$v = 0.7$	B	$v = 0.55$
C	$v = 1.45$		

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

$$P(v) = -6v^2 + 5v + 3$$

A	$v = 0.417$	B	$v = 1.583$
C	$v = 3.167$		

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

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

A	$v = 1$	B	$v = 2.75$
C	$v = 0.25$		

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

$$P(v) = -11v^2 + 7v + 3$$

A	$v = 1.682$	B	$v = 0.318$
C	$v = 1.818$		

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

$$P(v) = -11v^2 + 8v + 9$$

A	$v = 2.114$	B	$v = 0.364$
C	$v = 0.114$		

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

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

A	$v = 0.625$	B	$v = 1.625$
C	$v = 3.375$		

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

$$P(v) = -4v^2 + 8v + 2$$

A	$v = 1.25$	B	$v = 3$
C	$v = 1$		

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

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

A	$v = 1.25$	B	$v = 2.5$
C	$v = 0.5$		