



## Quadratic Equation Word Problem To Quadratic Solution Type - Profit by Volume

- 1 Given this equation for the profit as a function of production volume, what would you use to find the production volume that maximizes profit?

$$P(v) = -3v^2 + 5v + 8$$

- A The root of the quadratic    B The x value of the vertex  
C The y value of the vertex

- 2 Given this equation for the profit as a function of production volume, what would you use to find the production volume that maximizes profit?

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

- A The y value of the vertex    B The x value of the vertex  
C The root of the quadratic

- 3 Given this equation for the profit as a function of production volume, what would you use to find the maximum profit?

$$P(v) = -3v^2 + 9v + 7$$

- A The x value of the vertex    B The root of the quadratic  
C The y value of the vertex

- 4 Given this equation for the profit as a function of production volume, what would you use to find the maximum profit?

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

- A The x value of the vertex    B The y value of the vertex  
C The root of the quadratic

- 5 Given this equation for the profit as a function of production volume, what would you use to find the production volume that maximizes profit?

$$P(v) = -8v^2 + 7v + 11$$

- A The y value of the vertex    B The root of the quadratic  
C The x value of the vertex

- 6 Given this equation for the profit as a function of production volume, what would you use to find when the profit becomes zero?

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

- A The y value of the vertex    B The x value of the vertex  
C The root of the quadratic

- 7 Given this equation for the profit as a function of production volume, what would you use to find when the profit becomes zero?

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

- A The root of the quadratic    B The x value of the vertex  
C The y value of the vertex

- 8 Given this equation for the profit as a function of production volume, what would you use to find the maximum profit?

$$P(v) = -7v^2 + 8v + 10$$

- A The root of the quadratic    B The y value of the vertex  
C The x value of the vertex