

1) Solve this Quadratic. Find the Vertex and the two solutions.

$$y = -x^2 + 4x + 21$$

Vertex = $-b/2a =$

two solutions:

2) Find the equation of the line that passes through $(6,9)$ and $(-3,0)$.

Slope:

Equation of the line:

3) Complete a Breakeven analysis on this cost and revenue function. Use your calculator to find the breakeven points. Know price and revenue. Give business advice.

$$C(x) = x + 3$$

$$R(x) = -x^2 + 4x + 21$$

4) Complete a Breakeven analysis on this cost and revenue function. Use your calculator to find the breakeven points. Know price and revenue. Give business advice.

$$C(x) = 3x + 8$$

$$R(x) = -3x^2 + 12x + 8$$

5) Complete a Breakeven analysis on this cost and revenue function. Use your calculator to find the breakeven points. Know price and revenue. Give business advice.

$$C(x) = 2x + 5$$

$$R(x) = -x^2 + 9x - 2$$

6) Complete a Breakeven analysis on this cost and revenue function. Use your calculator to find the breakeven points. Know price and revenue. Give business advice.

$$C(x) = 5x + 200$$

$$R(x) = -7x^2 + 100x$$

7) Complete a Breakeven analysis on this cost and revenue function. Use your calculator to find the breakeven points. Know price and revenue. Give business advice.

$$C(x) = 18x + 1500$$

$$R(x) = -3x^2 + 160x$$

