Structure in Expressions - Worksheet 3

Find the zeros of the following mathematical expressions:

7.
$$x^5 - 25x^3 + 144x$$
.

1. (x-2)(x+7).

Solve the following problems:

2. (3x-5)(7x+2).

8. A gardener has 50 feet of fencing and wants to use all of it to fence in a rectangular plot with area 100 square feet. What should the dimensions of the fenced in area be?

3. $x^2 - 7x + 10$.

 $4. \ 3x^2 + 12x + 12.$

9. Is the vertex of $y = x^2 + 3x + 2$ a minimum or a maximum? What are the coordinates of the vertex?

5. $2x^2 - 9x + 10$.

10. Does the quadratic $y = -x^2 - 5x + 6$ have a minimum or a maximum? What are the coordinates of the vertex?

6. $x^3 + 5x^2 - 6x$.

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