1. State the vertex of the following function:
$$f(x) = x^2 + 10x + 37$$

6. Solve the following equation:
$$x^2 - 10x - 24 = 0$$

2. State the zeros of the following function:
$$f(x) = x^2 - 22x + 72$$

7. Determine the type of solution(s) to the following equation.
$$x^2 + 6x + 9 = 0$$

3. Rewrite the following equation in standard form:
$$f(x) = (2x + 5)(x + 3)$$

8. Determine the type of solution(s) to the following equation.
$$x^2 + 2x + 10 = 0$$

4. State the range of the following function:
$$f(x) = -(x - 5)(x + 3)$$

9. Solve the following equation.
$$2x^2 - x + 5 = 0$$

5. Solve the following equation:
$$x^2 = -8x$$

10. Solve the following equation.
$$3x^2 + 3x - 4 = 0$$