4.3 Re-Teach Worksheet Intermediate Algebra

Name _____

Learning Target: I can translate quadratic equations from standard form into factored form.

Write the following equations in factored form.

1.
$$x^2 + 17x + 16$$

2.
$$x^2 + 6x + 9$$

3.
$$x^2 - 9$$

4.
$$x^2 - 5x + 4$$

5.
$$2x^2 + 3x + 1$$

6.
$$4x^2 - 25$$

7.
$$6x^2 + 13x + 6$$

8.
$$2x^2 + 13x - 7$$

9.
$$12x^2 - x - 6$$

10.
$$3x^2 + 21x - 24$$

12.
$$3x^4 + 24x^3 + 45x^2$$

13.
$$10x^2 + 15x - 10$$

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14. What is the greatest common factor of $9x^4 - 6x^3 + 15x^2$

A. 3

B. 6x

- C. $3x^2$
- D. 6x²

15. What is a binomial factor of the expression $3x^2 + x - 10$

A. x - 2

- B. 3x + 5
- C. x 5
- D. x + 2

16. John took the equation $y = 4x^2 - 36$ and converted it from standard form to factored form. His new equation in factored form was y = 4(x - 3)(x - 3). John's solution is incorrect. Explain the mistakes John made when finding his solution.
