4.3 Re-Teach Worksheet
Intermediate Algebra

Name _____

Write the following equations in factored form.

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

$(x + 16)(x + 1)$

2. $4x^2 - 22x$

$2x(2x - 11)$

3. $x^2 - 9$

$x^2 + 0x - 9$

$(x - 3)(x + 3)$

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

$(x - 1)(x - 4)$

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

$(2x + 1)(x + 1)$

6. $4x^2 - 25$

$4x^2 + 0x - 25$

$(2x - 5)(2x + 5)$

7. $6x^2 + 12x$

$6x(x + 2)$

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

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

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

$(3x + 4)(2x - 3)$

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

$3(x^2 + 7x - 8)$

$3(x - 1)(x + 8)$

11. $18x^2 - 200$

$2(9x^2 - 100)$

$2(3x - 10)(3x + 10)$

12. $10x^2 + 15x - 10$

$5(2x^2 + 3x - 2)$

$5(2x - 1)(x + 2)$

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

    A. 3   B. 6x   C. $3x^2$ D. $6x^2$

14. What is a binomial factor of the expression $3x^2 + x - 10$ $(3x - 5)(x + 2)$

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

15. 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.

Should be $4(x-3)(x+3)$

~~4.t~~

because last term "c" is -36

2 #'s multipled together to be

- must be opposites