Factoring **Name: _____**

Trinomials: $ax^2 + bx + c$

Worksheet

Factoring $ax^2 + bx + c$ using the $a \cdot c$ method

Find two numbers where $\_\_ \cdot \_\_ = a \cdot c$ and $\_\_ + \_\_ = b$

Then rewrite the polynomial as

$ax^2 + \_\_x + \_\_x + c$ and factor by grouping.

Factor the following. Don't forget to factor out the GCF if necessary.

1. $2x^2 + 15x + 18$	2. $3x^2 - 11x - 20$	3. $5y^2 + 4y - 12$
4. $2a^2 - 17y + 8$	5. $4x^2 + 13x - 12$	6. $6x^2 - 13x + 6$
7. $5p^2 - 7p + 8$	8. $4x^2 - 4x - 15$	9. $3x^2 + 11xy - 4y^2$

10. $7u^2 - 19uv - 6v^2$	11. $2x^2 - 10x + 8$	12. $6m^2 - 20m - 16$
13. $6x^3 - x^2 - 2x$	14. $-10x^2 + 25x + 125$	15. $6ab^2 + 9ab - 42a$