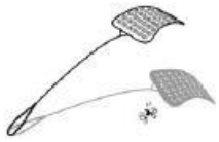
Name: Algebra II
Date: Chapter 6: Factoring Bust the B

Bust the "B"



Directions: Factor the given quadratics as far as possible.

When factoring $y = ax^2 + bx + c$, the process is simpler when a = 1.
This method is used if this is not the case ($a \neq 1$)

Example: $y = 2x^2 + x - 6$

$2 \cdot 6 = 12$

1 and 12
2 and 6
3 and 4

Multiply *a* and *c*

Find the factors of *ac* that differ to *b*

$y = 2x^2 + 4x - 3x - 6$ **Split the b term**
$y = (2x^2 + 4x) + (-3x - 6)$ **Group the pairs**
$y = 2x(x + 2) - 3(x + 2)$ **Factor out GCFs**
$y = (2x - 3)(x + 2)$ **Write the two binomials.**
Smile, you did it!

1. $5x^2 + 8x + 3$

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

3. $3x^2 - 16x + 5$

4. $2x^2 + x - 1$

5. $7x^2 + 10x + 3$

6. $5x^2 - 11x + 2$