Review: Factor the following:

1. $f(x) = x^2 + 3x - 18$

2. $f(x) = x^2 + 8x + 12$

Factoring when a ≠ 1

Steps: 1. Factor out common values
2. Find the factors of (a)(c)
3. Determine which of the factors add together to give you b.
4. Set up your parentheses with appropriate factors.

Signs:

If 2nd sign is negative (-)

You will have (+)(-) or
You will have (-)(+)

If 2nd sign is positive (+)

You will have (+)(+) if 1st sign is +
You will have (-)(-) if 1st sign is -

Factoring when a ≠ 1

Ex. 1 $2x^2 - 11x - 6$ Ex. 2 $2x^2 + 13x + 6$

Factoring when a ≠ 1

Ex. 3 $4x^2 + 3x + 1$ Ex. 4 $3x^2 + 2x - 8$

Factoring when a ≠ 1
You Try:

5. $2x^2 + 7x + 3$ 6. $3x^2 + 17x + 10$

Factoring when a ≠ 1
You Try:

7. $5x^2 - 7x + 2$ 8. $7x^2 - 4x - 3$