Factoring $ax^2 + bx + c$; $a \neq 1$

Strategy

1. Find the product of ac
2. Find factors of ac whose sum is b
3. Rewrite trinomial a polynomial with four terms using those factors
4. Group the first two terms and the last two terms and factor using D-Prop
5. Factor again using the D-Prop

1. $6x^2 + 9x + 3$

2. $8x^2 + 14x + 5$

3. $6x^2 + 19x + 10$

4. $12x^2 + 20x + 3$

5. $12x^2 + 28x - 5$

6. $6x^2 - 5x - 21$

7. $5x^2 + 58x - 24$

8. $5x^2 - 2x - 24$

9. $4x^2 + 23x + 15$

10. $4x^2 - 7x - 15$