

Name: _____ Date: _____ Period: _____

“5-4 Factor Completely” from standard form $ax^2 + bx + c$

- Always look for GCF first
- Look for a special case “perfect square trinomial” or “difference of two squares”
- Try something, using the ac and b terms to help refine the search and the factor pairs of a and c
- Some may be not break apart. If so, write “*unfactorable*”!

1) $2x^2 - 4x + 8$

2) $x^2 - 7x + 10$

3) $x^2 - 6x$

4) $2x^2 - 9x + 4$

5) $x^2 - 9$

6) $x^2 - 14x + 49$

7) $x^2 - 9x + 4$

8) $3x^2 + 16x + 21$

9) $3x^2 + 21x$

10) $9x^2 - 1$

11) $x^2 - 14x + 24$

12) $10x^2 - 17x + 3$

13) $x^2 + 16x + 64$

14) $2x^2 - 10x - 28$

15) $x^2 - 169$

16) $2x^2 - 5x - 7$

17) $4x^2 + 12x + 9$

18) $x^2 + 2x - 63$

19) $12x^2 + 4x - 5$

20) $x^2 - 5x + 6$

21) $x^2 - 13x - 48$