

Precalculus
Factoring Worksheet 1

Name _____
Period _____

Factor each polynomial completely.

1. $x^2 + 11x + 28$

2. $x^4 - 8x^2 - 33$

3. $x^3 + 4x^2 - 45x$

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

5. $3x^2 - 11x - 4$

6. $4x^2 + 4x - 3$

7. $6x^2 + 5x + 1$

8. $10x^2 + 26x - 12$

9. $x^2 - 9$

10. $25x^2 - 100$

11. $81 - 49y^2$

12. $x^3 + 1$

13. $8x^3 + 64$

14. $27x^3 + 125y^3$

15. $x^3 - 8$

16. $2x^3 - 54$

17. $64x^3 - y^3$

18. $x^3 + 2x^2 - 4x - 8$

19. $ax - bx + 2ay - 2by$

20. $3x^3 + 9x^2 + 6x + 18$

Precalculus
Factoring Worksheet 2

Name _____
Period _____

Factor each polynomial completely.

1. $x^2 + 12x + 35$

2. $x^4 - 7x^2 - 44$

3. $x^3 + 16x^2 - 17x$

4. $2x^2 + 7x + 6$

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

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

7. $4x^2 + 28x + 45$

8. $15x^3 - 18x^2 + 3x$

9. $x^2 - 64$

10. $18x^2 - 32$

11. $121x^2 - 196y^2$

12. $x^3 + 27$

13. $2x^3 + 128$

14. $64x^3 + 216y^3$

15. $x^3 - 1$

16. $2x^3 - 16$

17. $125x^3 - 8y^3$

18. $ax - ay + bx - by$

19. $x^3 + x^2 - 4x - 4$

20. $2x^3 + 6x^2 + 6x + 18$

Name _____

Date _____ Period _____

Factoring Trinomials ($a > 1$)

Factor each completely.

1) $3p^2 - 2p - 5$

2) $2n^2 + 3n - 9$

3) $3n^2 - 8n + 4$

4) $5n^2 + 19n + 12$

5) $2v^2 + 11v + 5$

6) $2n^2 + 5n + 2$