Factoring Polynomials

1. Use the quadratic formula to find all real zeros of the second-degree polynomial (similar to p.A24 #1-8)

$$x^2 - 8x + 3$$

2. Factor (Example)

$$8x - 64$$

3. Factor (Example)

$$4x^3 - 12x$$

4. Factor (Example)

$$-7x - 21$$

5. Factor (similar to p.A24 #9-10,17-18)

$$x^2 - 12x + 32$$

6. Factor (similar to p.A24 #9-10, 17-18)

$$x^2 - 6x - 40$$

7. Factor (similar to p.A24 #11-16)

$$8x^2 + 10x - 3$$

8. Factor (similar to p.A24 #11-16)

$$20x^2 - 12x + 1$$

9. Factor (similar to p.A24 #29-32)

$$3x^2 - x - 21x + 7$$

10. Factor (similar to p.A24 #29-32)

$$27x^2 + 9x - 6x - 2$$

11. Factor (similar to p.A24 #19-20)

$$9x^2 - 4$$

12. Factor (similar to p.A24 #21, 22, 25)

$$27x^3 - 64$$

13. Factor (similar to p.A24 #23, 24, 26)

$$x^3 + 27$$

14. Find all real zeros of the polynomial (similar to p.A24 #35-38)

$$x^2 - 16$$

15. Find all real zeros of the polynomial (similar to p.A24 #39-42)

$$x^2 - 7$$

16. Find all real zeros of the polynomial (similar to p.A24 #43-46)

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

17. Find all real zeros of the polynomial (similar to p.A24 #49-52)

$$x^3 - 27$$

18. Find all real zeros of the polynomial (similar to p.A24 #49-52)

$$x^4 - 81$$

19. Find all real zeros of the polynomial using graphing calculator (similar to p.A24 #65-74)

$$x^3 + x^2 - 17x + 15$$

20. Find all real zeros of the polynomial using graphing calculator (similar to p.A24 #65-74)

$$x^3 - 3x^2 - 17x + 51$$