Factoring Review

1. Factor out the greatest common factor
(Similar to p.71 #6)

$$15x^7 - 20x^6 + 10x^5$$

2. Factor out the greatest common factor

$$-18x^2 - 27x$$

3. Factor out the greatest common factor
(Similar to p.71 #8)

$$x(5x-1) - 2(5x-1)$$

4. Factor by grouping
(Similar to p.71 #14)

$$x^3 - 2x^2 - 7x + 14$$

5. Factor by grouping
(Similar to p.71 #12)

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

6. Factor each trinomial, or state that the trinomial is prime
(Similar to p.71 #22)

$$x^2 - 14x + 40$$

7. Factor each trinomial, or state that the trinomial is prime
(Similar to p.71 #18)

$$x^2 + 24x + 80$$

8. Factor each trinomial, or state that the trinomial is prime
(Similar to p.71 #20)

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

9. Factor each trinomial, or state that the trinomial is prime
(Example)

$$x^2 - 6xy - 40y^2$$

10. Factor each trinomial, or state that the trinomial is prime
(Similar to p.71 #28)

$$15x^2 - 16x + 4$$

11. Factor each trinomial, or state that the trinomial is prime
(Similar to p.71 #34)

$$16x^2 - 26x + 3$$

12. Factor each trinomial, or state that the trinomial is prime
(Similar to p.71 #38)

$$6x^2 - 17xy + 5y^2$$

13. Factor the difference of two squares
(Similar to p.71 #44)

$$25x^2 - 9y^2$$

14. Factor the difference of two squares
(Similar to p.71 #48)

$$16x^4 - 1$$

15. Factor using the difference of two cubes:
(Similar to p.71 #62)

$$8x^3 - 27$$

16. Factor using the sum of two cubes:
(Similar to p.71 #64)

$$27x^3 + 64$$

17. Factor completely
(Similar to p.71 #66)

$$2x^3 - 32x$$