Section 2.4 – Factoring by Grouping

Problem Set 2

Factor the following expressions.

1. $4b^{14} - 7b^{10} + 28b^4 - 49$

2. $10s^{14} - 4s^{13} - 40s^2 + 16s$

3. $-90x^7 - 18x^6 - 30x - 6$

4. $66x^{14} - 18x^{11} + 11x^3 - 3$

5. $-49w^{12} + 49w^9 + 35w^5 - 35w^2$

6. $-12w^7 - 48w^5 - 12w^2 - 48$

7. $18w^{16} - 12w^{10} - 72w^6 + 48$

8. $-12x^8 + 42x^6 - 24x^2 + 84$

9. $27a^{11} + 24a^8 - 90a^3 - 80$

10. $99a^5 - 110a^4 - 63a^2 + 70a$

11. $-20a^7 + 100a^6 - 6a^3 + 30a^2$

12. $84x^{12} - 28x^7 - 72x^5 + 24$

13. $48s^8 - 40s^6 + 60s^2 - 50$

14. $25s^{15} - 5s^{11} + 55s^4 - 11$

15. $-30b^5 + 60b^3 + 15b^2 - 30$