

**HWd: Chapter 9 Review B**

Name: \_\_\_\_\_ Per \_\_\_ Score: \_\_\_\_\_

**Add the following Polynomials:**

1.  $(10y^2 - 5y + 7) + (4y^2 - 11y - 10)$

2.  $(2y^2 - 5y - 17) - (6y^2 + 7y - 8)$

**Multiply the following Polynomials:**

3.  $9x(2x^2 + 5x + 11)$

4.  $(7x + 4)(6x - 3)$

5.  $(a - 15)(a + 15)$

6.  $(4m + 9)^2$

7.  $(3d - 2)(6d^2 + 10d + 5)$

**Factor out the GCF of following Polynomials:**

8.  $24w^2 - 8w$

9.  $6y^2 + 60y + 24$

10.  $108c^3 - 24c^2 + 36c$

**Factor the following Polynomials:**

11.  $x^2 - 81$

12.  $25x^2 - 121$

13.  $8x^2 - 8$

14.  $b^2 - 24b + 144$

15.  $p^2 + 26p + 169$

16.  $x^2 - 10x + 25$

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

18.  $p^2 - 3p - 54$

19.  $b^2 + 14b + 40$

20.  $2x^2 + 11x + 12$

21.  $5m^2 - 39m - 8$

22.  $9x^2 + 18x + 8$

**Factor the following polynomials. Be sure to factor COMPLETELY:**

23.  $5y^2 + 70y + 245$

24.  $x^3 - 8x^2 - 25x + 200$

25.  $2x^3 - 26x^2 + 60x$

## HWd: Chapter 9 Review B Answers

1. $14y^2 - 16y - 3$	2. $-4y^2 - 12y - 9$
3. $18x^3 + 45x^2 + 99x$	4. $42x^2 + 3x - 12$
5. $a^2 - 225$	6. $16m^2 + 72m + 81$
7. $18d^3 + 18d^2 - 5d - 10$	8. $8w(3w - 1)$
9. $6(y^2 + 10y + 4)$	10. $12c(9c^2 - 2c + 3)$
11. $(x - 9)(x + 9)$	12. $(5x - 11)(5x + 11)$
13. $8(x - 1)(x + 1)$	14. $(b - 12)(b - 12)$ or $(b - 12)^2$
15. $(p + 13)(p + 13)$ or $(p + 13)^2$	16. $(x - 5)(x - 5)$ or $(x - 5)^2$
17. $(x - 5)(x - 1)$	18. $(p - 9)(p + 6)$
19. $(b + 4)(b + 10)$	20. $(2x + 3)(x + 4)$
21. $(5m + 1)(m - 8)$	22. $(3x + 2)(3x + 4)$
23. $5(y + 7)(y + 7)$ or $5(y + 7)^2$	24. $(x - 8)(x - 5)(x + 5)$
25. $2x(x - 3)(x - 10)$	