REVIEW CHP. 8

Find the sum or difference.

1. $(4a^3 - 4a^2) + (6a^3 + 5a^2)$ 　　 2. $(2y^2 - 4y) - (-y^3 + 2)$

3. $(3x^2 + 2x - 2) - (5x^2 - 5x + 6)$

4. $(2h^2 - 7h + 10) + (h^2 + 4h + 7)$

Find the sum or difference.

1. $(4a^3 - 2a + 1) - (a^3 - 2a + 3)$

2. $(3x^3 + 4x + 14) + (-4x^2 + 21)$

3. $(3d - 5d^3 + 2d^2) - (8d^3 + 6d - 1)$

4. $(-3n + 7n) + (4n^3 - 2n^2 + 12)$

Find the sum or difference.

1. $(10p^2 - 5p^3 + 4 - 12p) + (8p^3 - 4p^2 + 5)$

2. $(-4x^2y - 5xy - y) - (-5x^2y + 6xy + 3)$

3. $(6cd + 3c + 9d) + (3cd - 5d)$

Find the product.

7. $n(2n^3 - 3n + 2)$ 　　　　　　　 8. $(2w - 3)(4w - 7)$

9. $(d^2 + 3d + 2)(d + 1)$ 　　　　 10. $(p + 3)(p - 3)$

11. $(t - 4)^2$ 　　　　　　　　　　 12. $(2s - 5)(2s + 5)$

Find the product.

7. $-4c(-9c^2 + 5c + 8)$

8. $(y + 4)(5y - 3)$

9. $(s^2 + 6s - 5)(5s + 2)$

10. $(4p + 1)(4p - 1)$

11. $(w - 5)^2$

12. $(2b + 3)^2$

Solve the equation.

15. $(q + 7)(q - 4) = 0$

16. $(4z - 1)(z + 5) = 0$

Solve the equation.

15. $(h - 7)(2h + 1) = 0$

16. $4g^2 - 32g = 0$

17. $3m^2 = -6m$

Factor out the greatest common monomial factor.

17. $4c^8 - 8c^5$

18. $6f^2g^3 + 12g$

19. $2k^3 + 6k^2 - 14k$

Solve the equation.

20. $3m^2 - 9m = 0$

21. $7u^2 = 3u$

Factor the trinomial.

24. $x^2 + 9x + 14$

25. $y^2 - y - 12$

26. $3m^2 + 20m + 12$

Factor the trinomial.

20. $n^2 - 14n - 72$

21. $-x^2 + 14x - 45$

22. $6k^2 - k - 12$

Factor the trinomial.

18. $x^2 - 14xy - 51y^2$

19. $4m^2 + 9mn + 5n^2$

20. $2c^3 - 7c^2d + 3cd^2$

Factor the polynomial completely.

28. $3x^3 + 15x^2 + 18x$ **29.** $2s^2 - 18$

30. $r(r + 3) + 7(r + 3)$

Solve the equation.

31. $b^4 - 3b^3 - 10b^2 = 0$ **32.** $j(j + 3) = 28$

Factor the polynomial completely.

25. $x^5 - x^3$ **26.** $5a(a - 3) - 7(a - 3)$

27. $9t^4 + 30t^3 + 25t^2$ **28.** $b^3 + 5b^2 - 3b - 15$

Solve the equation.

29. $x^2 + 8x + 15 = 0$ **30.** $7y - 2 = 5y^2$

31. $72 = 32q^2$ **32.** $u^3 + 6u^2 = 4u + 24$

Factor the polynomial completely.

23. $36p - 49p^3$ **24.** $9y^3 + 30y^2 + 25y$

25. $uv + wx - wv - ux$ **26.** $25a^2 - 20ab^3 + 4b^6$

27. $-3c^2 + 75u^2$ **28.** $x^3 + 2x^2 - 49x - 98$