

LESSON 5-2

Practice and Problem Solving: A/B

1. $x^2 + 11x + 30$

2. $a^2 - 10a + 21$

3. $d^2 + 4d - 32$

4. $2x^2 + 5x - 12$

5. $5b^2 - 9b - 2$

6. $6p^2 + 5p - 6$

7. $10k^2 - 38k + 36$

8. $6m^2 + m - 40$

9. $20 + 3g - 56g^2$

10. $r^2 - 4rs - 12s^2$

11. $6 - 19v + 10v^2$

12. $25 - h^2$

13. $y^2 - 9$

14. $z^2 - 10z + 25$

15. $9q^2 - 49$

16. $16w^2 + 72w + 81$

17. $9a^2 - 24a + 16$

18. $25q^2 - 64r^2$

19. $x^3 + 7x^2 + 17x + 20$

20. $3m^3 - 5m^2 + 3m + 20$

21. $8x^3 - 26x^2 + 17x - 5$

22. $5x^2 + 6x + 1$

23. 105 in.^2

24. $3x^2 - 12$; \$351

Practice and Problem Solving: C

1. $2x^2 + 22x + 60$

2. $3a^2 - 30a + 63$

3. $-160 + 20d + 5d^2$

4. $8x^2 + 20x - 48$

5. $30b^2 - 54b - 12$

6. $-12p^2 - 10p + 12$

7. $20(k^3) - 76(k^2) + 72k$

8. $6m^4 + m^3 - 40m^2$

9. $-160g^2 - 24g^3 + 448g^4$

10. $r^3s - 4r^2s^2 - 12rs^3$

11. $24v - 76v^2 + 40v^3$

12. $150h^2 - 486h^4$

13. $4y^5 - 9y$

14. $108z^2 - 180z + 75$

15. $36c^3 - 196cd^2$

16. $-48w^3 - 216w^2 - 243w$

17. $18a^3 - 48a^2 + 32a$

18. $25q^5r - 64qr^5$

19. $6x^3 - 11x^2 - 18x + 7$

20. $20z^3 + 24z^2 - 5z - 6$

21. $25x^3 + 20x^2 - 51x + 18$

22. $8x^3 + 36x^2 + 54x + 27$

23. Substitute 4 for x and evaluate the polynomial; 1,331 in.³; substitute 4 in $2x + 3$ and cube it. The results should be the same.

24. $n^2 - 1$; $n^3 - 1$; $n^4 - 1$; the greatest power of n in the polynomial is increased by 1 and the product is the difference between that power of n and 1; $n^5 - 1$