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11-4B Lesson Master**Questions on SPUR Objectives**

See pages 708–711 for objectives.

SKILLS Objective C

In 1 and 2, list all the factors of the monomial.

1. $21x^3$

2. $6yz$

In 3–6, find the GCF.

3. $3m^3$ and $24m^2n$

4. $12p^2r^3$ and $8pr^2$

5. $15s^3t^5$, $6s^2$, and $18t^4$

6. $20v^4w$, $28v^2w^2$, and $8v^3w^3$

In 7–17, complete the products.

7. $9c - 21 = 3(\text{_____} - \text{_____})$

8. $34d^2 + 51d = 17d(\text{_____} + \text{_____})$

9. $42c^5 + 28c^3 - 35c^2 = 7c^2(\text{_____} - \text{_____} - \text{_____})$

10. $22e^4 - 44e^2 + 66e = 22e(\text{_____} + \text{_____} + \text{_____})$

11. $5f^5 + 30f^4 - 10f^2 = 5f^2(\text{_____} + \text{_____} - \text{_____})$

12. $15g^7 - 9g^6 + 24g^5 = 3g^5(\text{_____} - \text{_____} + \text{_____})$

13. $18ab^2 - 27a^3b = 9ab(\text{_____} - \text{_____})$

14. $16x^2y^4 + 40x^3y^5 = 4x^2y^2(\text{_____} + \text{_____})$

15. $14m^3n^2 - 21m^2n + 35mn^2 = 7mn(\text{_____} - \text{_____} + \text{_____})$

16. $6r^4s^8 - 15r^3s^7 - 30r^5s^6 = 3r^3s^6(\text{_____} - \text{_____} - \text{_____})$

17. $32u^5v^6 + 4u^4v^5 + 8u^6v^7 = 4u^4v^5(\text{_____} + \text{_____} + \text{_____})$

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In 18–23, simplify.

18. $\frac{13w^3 + 26w^6}{13w^3}$

19. $\frac{70x^9 - 42x^4}{7x^4}$

20. $\frac{55y^2z^5 + 44y^3z^2}{-11y^2z^2}$

21. $\frac{18a^2 - 27a^5 + 3a}{3a}$

22. $\frac{30b^3 + 42b^7 - 54b^5}{-6b^3}$

23. $\frac{64c^3d^4 - 56c^2d^5 + 40c^4d^3}{8c^2d^3}$

In 24–35, factor the polynomial completely.

24. $42e - 12$

25. $77f + 14$

26. $25g^2 + 70g^3$

27. $52h^8 - 24h^5$

28. $72i^7 - 27i^{10}$

29. $48k^6m^3 + 32k^4m^6$

30. $12n^9p^5 + 36n^3p^3$

31. $55q^{10}r - 44qr^{10}$

32. $60s^2 + 36s^4 - 30s^6$

33. $69u^3v^5 + 46u^2v^4 - 23u^3v^4$

34. $13y^8 - 26y^4$

35. $14b^3c^2 - 28b^2c^3 + 21bc^4$
