1. 36
2. $27j^3$
3. r^4s^{12}
4. $343t^6$
5. $16a^{10}$
6. $32c^{10}$
7. $8x^6$
8. a^6b^{12}
9. $8a^{15}$
10. c^6
11. $8b^3$
12. a^2c^4
13. $10{,}000x^{12}$
14. $-x^2y^2$
15. $-125b^3$
16. $-9x^2$
17. $25c^6$
18. $-x^4y^4$
19. $-27a^{12}b^3$
20. $-m^8n^4$
21. a. $25s^4$ cm^2

    b. Yes; the area of the tablecloth is $25s^4$ cm^2 which is greater than $20s^4$ cm^2.
22. $\frac{4}{25}$
23. $-\frac{8}{125}$
24. $\frac{16}{49y^2}$
25. $\frac{81x^8}{10{,}000}$
26. $\frac{16}{81}$
27. $\frac{9}{49}$
28. $\frac{m^6}{b^{18}}$
29. $\frac{1}{81x^8}$
30. $-\frac{27}{64}$
31. $\frac{9t^4}{25}$
32. 2
33. 1
34. 4
35. 3
36. 5
37. 3
38. 81
39. $-\frac{1}{27}$
40. 1
41. 9
42. $16c^2$ units^2
43. $(3x^2)^2 = 9x^4$ ft^2
44. Answers may vary. Sample: The square of a number and the square of its opposite are the same.
45. 1,728
46. 100
47. 225
48. $4a^2b^6$
49. $-\frac{125}{512}$
50. $-\frac{32}{x^{15}}$

51. $\frac{4c^2}{49d^2}$

52. $-\frac{27a^3}{b^6}$

53. $\frac{4x^2}{49y^2}$

54. $\frac{16c^4}{d^8}$

55. $-\frac{1}{32y^{15}}$

56. $\frac{x^{15}}{32y^{20}}$

57. 4

58. 3

59. 3; 6

60. 4; 768

61. $\frac{343}{1000}$ units^3

62. $\frac{1}{8y^3}$ units^3

63. $\frac{343a^3}{8c^3}$ units^3