Find the value of the expression.

1. $(2^3 i)^3$

2. $(3^2 i)^4$

3. $(4^4 i)^5$

4. $(4^3 i)^2$

5. $(3^2 i)^3$

Simplify:

6. $(v^5 i)^e$

7. $(x^3 i)^r$

8. $(m^4 i)^t$

9. $(w^5 i)^w$

10. $(y^2 i)^u$

11. $(c^3 i)^f$

Simplify:

12. $(k^4)^n$

13. $(k^5)^h$

14. $(h^2)^q$

15. $(f^3)^a$

16. $(-k^2)^5$ [A] $-k^{32}$ [B] $-k^{2/5}$ [C] $-k^{10}$ [D] k^7

17. $(g^3)^6$ [A] g^{729} [B] g^{18} [C] g^9 [D] $g^{1/2}$

18. $(c^5)^3$ [A] c^8 [B] c^{15} [C] $c^{5/3}$ [D] c^{125}

19. $(-n^3)^6$ [A] $-n^{729}$ [B] $n^{1/2}$ [C] n^{18} [D] n^9

20. $(-f^5)^4$ [A] f^{20} [B] f^9 [C] $-f^{625}$ [D] $f^{5/4}$

21. $(a^4)^3$ [A] $a^{4/3}$ [B] a^{64} [C] a^7 [D] a^{12}

22. $(-h^3)^2$ [A] h^6 [B] $-h^9$ [C] $h^{3/2}$ [D] h^5

23. $(j^2)^5$ [A] j^7 [B] $j^{2/5}$ [C] j^{32} [D] j^{10}

24. $(m^5)^4$ [A] $m^{5/4}$ [B] m^9 [C] m^{20} [D] m^{625}

25. $(-t^4)^5$ [A] $-t^{4/5}$ [B] $-t^{1024}$ [C] t^9 [D] $-t^{20}$

Simplify:

26. $(2x^3y^3)(x^3y)^3$ [A] $9x^{12}y^{10}$ [B] $8x^{18}y^{12}$ [C] $9x^{18}y^{12}$ [D] $8x^{12}y^{10}$

27. $(-3x^2y)^2(5xy^3)^2$ [A] $225x^6y^8$ [B] $34x^7y^8$ [C] $225x^7y^8$ [D] $34x^6y^8$

28. $(4x^4y^4)^2(2x^2y^4)^2$ [A] $64x^{10}y^{12}$ [B] $20x^{10}y^{12}$ [C] $20x^{12}y^{16}$ [D] $64x^{12}y^{16}$

29. $(-5xy^2)^3(-3x^4y^2)^3$

     [A] $-152x^{11}y^{10}$ [B] $3375x^{15}y^{12}$ [C] $-152x^{15}y^{12}$ [D] $3375x^{11}y^{10}$

30. $(-x^3y^4)^3(4xy^2)^2$ [A] $-16x^9y^{11}$ [B] $15x^{11}y^{16}$ [C] $-16x^{11}y^{16}$ [D] $15x^9y^{11}$

31. $(-5x^2y)^2(-5x^4y^4)^3$

     [A] $-3125x^{11}y^{10}$ [B] $-100x^{16}y^{14}$ [C] $-100x^{11}y^{10}$ [D] $-3125x^{16}y^{14}$

32. $(-3x^4y^3)^3(2x^2y)^2$

     [A] $-108x^{16}y^{11}$ [B] $-23x^{11}y^9$ [C] $-23x^{16}y^{11}$ [D] $-108x^{11}y^9$

33. $(-4xy^2)^2(-3x^3y^3)^3$

     [A] $-11x^{11}y^{13}$ [B] $-432x^9y^{10}$ [C] $-11x^9y^{10}$ [D] $-432x^{11}y^{13}$

34. $(2x^3y^3)^3(-4xy^3)^2$ [A] $128x^9y^{11}$ [B] $24x^9y^{11}$ [C] $128x^{11}y^{15}$ [D] $24x^{11}y^{15}$

35. $(5x^2y^2)^2(-x^2y^4)^3$ [A] $-25x^{10}y^{16}$ [B] $24x^{10}y^{16}$ [C] $-25x^9y^{11}$ [D] $24x^9y^{11}$

36. $7(3r^4)^2$ [A] $63r^6$ [B] $441r^8$ [C] $441r^6$ [D] $63r^8$

37. $8(2m^3)^3$ [A] $4096m^6$ [B] $64m^9$ [C] $64m^6$ [D] $4096m^9$

Simplify:

38. $3\left(4t^2\right)^4$ [A] $768t^8$ [B] $768t^6$ [C] $20{,}736t^8$ [D] $20{,}736t^6$

39. $4\left(-5p^3\right)^3$ [A] $-500p^9$ [B] $-8000p^6$ [C] $-500p^6$ [D] $-8000p^9$

40. $9\left(3k^2\right)^2$ [A] $729k^4$ [B] $81k^5$ [C] $81k^4$ [D] $729k^5$

41. $2\left(-2v^4\right)^4$ [A] $256v^{16}$ [B] $32v^{16}$ [C] $256v^8$ [D] $32v^8$

42. $6\left(-4y^4\right)^2$ [A] $96y^6$ [B] $576y^6$ [C] $96y^8$ [D] $576y^8$

43. $10\left(-5d^2\right)^3$

     [A] $-125{,}000d^6$ [B] $-125{,}000d^5$ [C] $-1250d^6$ [D] $-1250d^5$

44. $5\left(-3h^3\right)^4$ [A] $50{,}625h^{12}$ [B] $50{,}625h^7$ [C] $405h^7$ [D] $405h^{12}$

45. $7\left(2c^4\right)^4$ [A] $112c^8$ [B] $112c^{16}$ [C] $38{,}416c^8$ [D] $38{,}416c^{16}$

46. $\left(-2x^5yz^2\right)^2$

47. $\left(-u^3v^4w^6\right)^4$

48. $\left(-4f^4g^3h^2\right)^3$

49. $\left(4rs^6t^5\right)^3$

50. $\left(5e^5f^4g^3\right)^2$

Simplify:

51. $\left(3de^2f^6\right)^4$

52. $\left(-5t^2u^5v^4\right)^2$

53. $\left(p^6qr^3\right)^3$

54. $\left(-3e^5f^3g^6\right)^4$

55. $\left(2b^4c^2d\right)^2$

56. Evaluate ka^e, for $k = 4$, $a = 10$, and $e = 2$.

57. Evaluate $-ka^e$, for $k = 3$, $a = 5$, and $e = 3$.

58. Evaluate $\left(ka\right)^e$, for $k = 2$, $a = 10$, and $e = 4$.

59. Evaluate $\left(-ka\right)^e$, for $k = 2$, $a = 5$, and $e = 2$.

60. Evaluate ka^e, for $k = 4$, $a = 5$, and $e = 3$.