

Simplify using the properties of rational exponents:

Random Seed: 148190

1. $5^{\frac{3}{4}} \cdot 5^{\frac{1}{2}}$
2. $x^{\frac{3}{4}} \cdot x^{\frac{1}{5}}$
3. $6^{\frac{1}{2}} \cdot 6^{\frac{1}{4}}$
4. $y^{\frac{2}{3}} \cdot y^{\frac{3}{2}}$
5. $3^{\frac{2}{5}} \cdot 3^{\frac{2}{5}}$
6. $4^{\frac{1}{4}} \cdot 4^{\frac{3}{4}}$
7. $y^{\frac{2}{4}} \cdot y^{\frac{3}{4}}$
8. $x^{\frac{1}{3}} \cdot x^{\frac{2}{4}}$
9. $3^{\frac{1}{4}} \cdot 3^{\frac{2}{4}}$
10. $x^{\frac{3}{2}} \cdot x^{\frac{1}{4}}$
11. $6^{\frac{1}{5}} \cdot 6^{\frac{3}{2}}$
12. $7^{\frac{1}{2}} \cdot 7^{\frac{2}{4}}$
13. $x^{\frac{1}{3}} \cdot x^{\frac{3}{4}}$
14. $3^{\frac{1}{4}} \cdot 3^{\frac{2}{5}}$
15. $4^{\frac{3}{2}} \cdot 4^{\frac{1}{2}}$
16. $2^{\frac{2}{5}} \cdot 2^{\frac{1}{2}}$
17. $2^{\frac{3}{4}} \cdot 2^{\frac{3}{4}}$
18. $3^{\frac{2}{4}} \cdot 3^{\frac{3}{4}}$
19. $y^{\frac{2}{3}} \cdot y^{\frac{2}{3}}$
20. $x^{\frac{2}{4}} \cdot x^{\frac{1}{3}}$
21. $\frac{5^{\frac{1}{4}}}{5^{\frac{3}{4}}}$
22. $\frac{x^{\frac{1}{3}}}{x^{\frac{3}{3}}}$
23. $\frac{6^{\frac{1}{4}}}{6^{\frac{1}{2}}}$
24. $\frac{y^{\frac{3}{5}}}{y^{\frac{2}{5}}}$
25. $\frac{3^{\frac{3}{4}}}{3^{\frac{1}{4}}}$
26. $\frac{4^{\frac{3}{4}}}{4^{\frac{1}{3}}}$
27. $\frac{y^{\frac{3}{2}}}{y^{\frac{1}{4}}}$
28. $\frac{x^{\frac{2}{2}}}{x^{\frac{1}{4}}}$
29. $\frac{3^{\frac{2}{3}}}{3^{\frac{1}{5}}}$
30. $\frac{x^{\frac{1}{2}}}{x^{\frac{3}{4}}}$
31. $\frac{6^{\frac{2}{3}}}{6^{\frac{1}{5}}}$
32. $\frac{7^{\frac{2}{2}}}{7^{\frac{1}{2}}}$
33. $\frac{x^{\frac{3}{2}}}{x^{\frac{1}{2}}}$
34. $\frac{3^{\frac{2}{2}}}{3^{\frac{1}{3}}}$
35. $\frac{4^{\frac{1}{3}}}{4^{\frac{1}{2}}}$
36. $\frac{2^{\frac{1}{4}}}{2^{\frac{2}{3}}}$
37. $\frac{2^{\frac{3}{5}}}{2^{\frac{2}{3}}}$
38. $\frac{3^{\frac{3}{4}}}{3^{\frac{1}{4}}}$
39. $\frac{y^{\frac{2}{5}}}{y^{\frac{1}{4}}}$
40. $\frac{x^{\frac{1}{2}}}{x^{\frac{2}{5}}}$
41. $(5^{\frac{3}{4}})^{\frac{3}{4}}$
42. $(x^{\frac{2}{3}})^{\frac{3}{4}}$
43. $(6^{\frac{1}{4}})^{\frac{1}{2}}$
44. $(y^{\frac{2}{5}})^{\frac{2}{3}}$
45. $(3^{\frac{1}{4}})^{\frac{2}{5}}$
46. $(4^{\frac{1}{4}})^{\frac{1}{4}}$
47. $(y^{\frac{1}{2}})^{\frac{2}{4}}$
48. $(x^{\frac{1}{2}})^{\frac{1}{3}}$
49. $(3^{\frac{1}{3}})^{\frac{1}{4}}$
50. $(x^{\frac{1}{2}})^{\frac{3}{2}}$
51. $(6^{\frac{1}{3}})^{\frac{1}{5}}$
52. $(7^{\frac{1}{2}})^{\frac{1}{2}}$
53. $(x^{\frac{3}{2}})^{\frac{1}{3}}$
54. $(3^{\frac{3}{2}})^{\frac{1}{4}}$
55. $(4^{\frac{2}{3}})^{\frac{3}{2}}$
56. $(2^{\frac{1}{4}})^{\frac{2}{5}}$
57. $(2^{\frac{1}{5}})^{\frac{3}{4}}$
58. $(3^{\frac{3}{4}})^{\frac{2}{4}}$
59. $(y^{\frac{2}{5}})^{\frac{2}{3}}$
60. $(x^{\frac{3}{2}})^{\frac{2}{4}}$
61. $(x^{\frac{1}{5}}y^{-\frac{1}{4}})^{\frac{1}{5}}$
62. $(x^{\frac{1}{3}}y^{\frac{4}{5}})^{\frac{1}{2}}$
63. $(x^4y^4)^{\frac{1}{2}}$
64. $(x^{\frac{1}{2}}y^{\frac{1}{5}})^{\frac{3}{4}}$
65. $(x^4y^{\frac{3}{5}})^{\frac{3}{2}}$
66. $(x^{\frac{1}{4}}y^{\frac{4}{5}})^{\frac{3}{5}}$
67. $(x^3y^{-\frac{2}{5}})^{\frac{2}{3}}$
68. $(x^{\frac{1}{2}}y^{\frac{2}{3}})^3$
69. $(x^{\frac{3}{4}}y^{-\frac{1}{5}})^2$
70. $(x^{\frac{3}{5}}y^{\frac{3}{2}})^5$
71. $(x^{\frac{3}{2}}y^{-\frac{3}{2}})^{\frac{3}{5}}$
72. $(x^5y^{-\frac{1}{4}})^{\frac{3}{4}}$
73. $(x^{\frac{1}{2}}y^4)^{\frac{4}{5}}$
74. $(x^{\frac{1}{2}}y^{-\frac{1}{3}})^{\frac{1}{4}}$
75. $(x^{\frac{3}{4}}y^{-\frac{4}{5}})^{\frac{1}{2}}$
76. $(x^{\frac{1}{2}}y^2)^{\frac{2}{3}}$
77. $(x^2y^{\frac{1}{2}})^{\frac{1}{5}}$
78. $(x^{\frac{2}{3}}y^{-\frac{1}{4}})^{\frac{3}{5}}$
79. $(x^2y^{\frac{1}{4}})^5$
80. $(x^{\frac{1}{5}}y^{\frac{3}{4}})^{\frac{2}{5}}$

1. $5^{\frac{5}{4}}$
2. $x^{\frac{19}{20}}$
3. $6^{\frac{3}{4}}$
4. $y^{\frac{13}{6}}$
5. $3^{\frac{4}{5}}$
6. 4
7. $y^{\frac{5}{4}}$
8. $x^{\frac{5}{6}}$
9. $3^{\frac{3}{4}}$
10. $x^{\frac{7}{4}}$
11. $6^{\frac{17}{10}}$
12. 7
13. $x^{\frac{13}{12}}$
14. $3^{\frac{13}{20}}$
15. 4^2
16. $2^{\frac{9}{10}}$
17. $2^{\frac{3}{2}}$
18. $3^{\frac{5}{4}}$
19. $y^{\frac{4}{3}}$
20. $x^{\frac{5}{6}}$
21. $\frac{1}{5^{\frac{1}{2}}}$
22. $\frac{1}{x^{\frac{2}{3}}}$
23. $\frac{1}{6^{\frac{1}{4}}}$
24. $y^{\frac{1}{5}}$
25. 1
26. $4^{\frac{5}{12}}$
27. y^1
28. $x^{\frac{3}{4}}$
29. $3^{\frac{7}{15}}$
30. $\frac{1}{x^{\frac{1}{4}}}$
31. $6^{\frac{4}{5}}$
32. $7^{\frac{1}{2}}$
33. x^1
34. $3^{\frac{2}{3}}$
35. $\frac{1}{4^{\frac{6}{7}}}$
36. $\frac{1}{2^{\frac{5}{12}}}$
37. $\frac{1}{2^{\frac{5}{2}}}$
38. $3^{\frac{1}{4}}$
39. $\frac{1}{y^{\frac{1}{10}}}$
40. $x^{\frac{1}{10}}$
41. $5^{\frac{9}{16}}$
42. \sqrt{x}
43. $6^{\frac{1}{8}}$
44. $y^{\frac{4}{15}}$
45. $3^{\frac{1}{10}}$
46. $4^{\frac{1}{16}}$
47. $y^{\frac{1}{4}}$
48. $x^{\frac{1}{6}}$
49. $3^{\frac{1}{12}}$
50. $x^{\frac{3}{4}}$
51. $6^{\frac{1}{15}}$
52. $7^{\frac{1}{4}}$
53. \sqrt{x}
54. $3^{\frac{3}{8}}$
55. 4
56. $2^{\frac{1}{10}}$
57. $2^{\frac{3}{20}}$
58. $3^{\frac{3}{8}}$
59. $y^{\frac{4}{15}}$
60. $x^{\frac{3}{4}}$
61. $\frac{x^{\frac{1}{25}}}{y^{\frac{1}{20}}}$
62. $x^{\frac{1}{6}}y^{\frac{2}{5}}$
63. x^2y^2
64. $x^{\frac{3}{8}}y^{\frac{3}{20}}$
65. $x^6y^{\frac{9}{10}}$
66. $x^{\frac{3}{20}}y^{\frac{12}{25}}$
67. $\frac{x^2}{y^{\frac{4}{15}}}$
68. $x^{\frac{3}{2}}y^2$
69. $\frac{x^{\frac{3}{2}}}{y^{\frac{5}{5}}}$
70. $x^3y^{\frac{15}{2}}$
71. $\frac{x^{\frac{9}{10}}}{y^{\frac{9}{10}}}$
72. $\frac{x^{\frac{15}{4}}}{y^{\frac{3}{16}}}$
73. $x^{\frac{2}{5}}y^{\frac{16}{5}}$
74. $\frac{x^{\frac{1}{8}}}{y^{\frac{1}{12}}}$
75. $\frac{x^{\frac{3}{8}}}{y^{\frac{5}{5}}}$
76. $x^{\frac{1}{3}}y^{\frac{4}{3}}$
77. $x^{\frac{2}{5}}y^{\frac{1}{10}}$
78. $\frac{x^{\frac{2}{5}}}{y^{\frac{3}{20}}}$
79. $x^{10}y^{\frac{5}{4}}$
80. $x^{\frac{2}{25}}y^{\frac{3}{10}}$