

Exponents and Radicals Practice
Math 1090-008
August 30, 2005

1. Eliminate negative exponents in $\frac{x^{-2}y^3}{z^{-2}}$
2. Simplify $\frac{x^2y^7}{x^3y^5}$
3. Simplify $(x^5y^8)^5$
4. Simplify $(x^{\frac{5}{9}}y^{\frac{4}{3}})^{18}$
5. Simplify $(\frac{x^{\frac{1}{5}}y^{\frac{6}{3}}}{z^{\frac{6}{5}}})^5$
6. Simplify $\frac{x^3}{y^2} \div \frac{x^6}{y^5}$
7. Eliminate negative exponents in $x^{-1} + y^{-1}$ and simplify
8. Simplify $x^{\frac{3}{2}} - x^{\frac{1}{2}}$
9. Eliminate negative exponents in $7x^{-2} + (7x)^{-2}$
10. Eliminate negative exponents in $(x^{-1} - y^{-1})^{-2}$
11. Apply distributive law to $x^{\frac{2}{5}}(y^{\frac{1}{2}} + 2x^{\frac{6}{5}})$
12. Simplify $\sqrt[4]{48}$
13. Rewrite $\sqrt{2+5x}$ without a radical sign
14. Rationalize the denominator of $\frac{\sqrt[5]{2}}{\sqrt[3]{6}}$ and simplify
15. Simplify $\frac{\sqrt{20}}{\sqrt{5}}$
16. Simplify $\sqrt[3]{x^6y^4}$
17. Simplify $\sqrt{\frac{2}{7}}$
18. Simplify $\sqrt{250} - \sqrt{50} + 15\sqrt{2}$
19. If x is any real number, simplify $\sqrt{x^2}$