

HW: Negative and Rational Exponents

Name _____

Exponents: Write the simplified answer on the line.

1. Simplify $\left(\frac{2x^3y^5}{3x^{-2}y^3}\right)^0$ _____

2. Simplify $\frac{12x^{-4}y^2}{3x^3y^3}$ _____

3. Simplify $(-3xy^4)^2$ _____

4. Simplify $(8a^3b^2)^{\frac{1}{3}}$ _____

5. Simplify $(36a^5b^6)^{\frac{1}{2}}$ _____

6. Simplify $(25a^4b^8)^{\frac{1}{2}}$ _____

7. Simplify $(64a^2b^2)^{\frac{1}{3}}$ _____

8. Simplify $(125b^4)^{\frac{1}{3}}$ _____

9. Simplify $\sqrt[3]{64x^9}$ _____

10. Simplify $\sqrt[3]{x^4}$ _____

11. Simplify $\sqrt{100xy^2}$ _____

12. Simplify $\sqrt{25x^3y^2}$ _____

13. Simplify $(x^5)^{-\frac{1}{5}}$ _____