

Name: _____

Date: _____

Scaffolded Practice: Working with Rational Exponents

For problems 1–4, rewrite each exponential expression as a radical expression.

1. $2^{\frac{1}{4}}$

2. $x^{\frac{3}{2}}$

3. $6^{\frac{2}{7}}$

4. $3^{\frac{4}{1}}$

For problems 5–8, rewrite each radical expression as an exponential expression.

5. $\sqrt[4]{x^2}$

6. $\sqrt[3]{3^2}$

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7. $\sqrt[3]{1}$

8. $\sqrt[2]{9^2}$

For problems 9 and 10, evaluate the expression.

9. $3^{\frac{4}{2}}$

10. $\sqrt[4]{4^4}$