

Operations with Radical Expressions Bell Work

1. Answer all questions.

a. What is the radicand in the expression $\sqrt[4]{13}$?

b. What is the index in the expression \sqrt{xy} ?

c. What is the value of $-\sqrt{121}$?

d. What is the value of $-\sqrt[3]{\frac{27}{8}}$?

2. Simplify the radical expressions.

a) $\sqrt{81} =$

b) $\sqrt[3]{(-343x^3)} =$

c) $\sqrt[3]{729} =$

3. Write T for true or F for false.

1. $\sqrt[3]{48} = \sqrt[3]{4} * \sqrt[3]{8}$

b) $\sqrt{33} * \sqrt{2} = \sqrt[4]{66}$

c) $\sqrt{\frac{1}{4}} = \frac{1}{2}$

d) $\sqrt[3]{\frac{x^3}{y^3}} = \frac{x}{y}$

4. Which radical expression is not in simplest form?

a. $3\sqrt{6}$

b. $6\sqrt{131}$

c. $5\sqrt{12}$

d. $\frac{1}{2}\sqrt{17}$

5. Write the simplest form of:

$$\frac{\sqrt{7}}{\sqrt{63}} =$$