

1. Simplify by first writing in radical form.

a) $25^{\frac{3}{2}}$

b) $(-32)^{1/5}$

c) $27^{-\frac{2}{3}}$

2. Rewrite each expression with rational exponents.

a) $\sqrt{17}$

b) $\sqrt[3]{17}$

c) $\sqrt[7]{x^4}$

3. Simplify. Write your answers in exponential form with only positive exponents. Assume all variables represent positive numbers.

a) $2^{\frac{2}{5}} \cdot 2^{\frac{3}{5}}$

b) $\left(32^{\frac{2}{3}}\right)^{\frac{3}{5}}$

c) $\frac{x^{1/4}}{x^{-3/5}}$

d) $\left(y^{-\frac{3}{4}}\right)^{\frac{1}{6}}$

e) $(x^8 y^{2/3})^{1/4}$

Q: What are the next two letters in the following series and why?

W A T N T L I T F S _ _