

Practice

Which of the following is equal to $a^{\frac{2}{3}}$, for all values of a ?

A) $\sqrt{a^{\frac{1}{3}}}$

B) $\sqrt{a^3}$

C) $\sqrt[3]{a^{\frac{1}{2}}}$

D) $\sqrt[3]{a^2}$

$$5x^7y^3z^{-2}(3xy^4z)$$

$$\frac{14x^5y^{-3}z^3}{7x^3y^{-7}z^8}$$

$$(2x^4y)^3$$

$$(49x^4)^{\frac{1}{2}}(x^3)^2$$

$$\frac{3x^4yz^5}{2x^7y^{-5}z^2}$$

$$\sqrt{x} \cdot x^{\frac{3}{2}}y$$

$$-2x^2y^4(4xy^3)^{-1}$$

$$\left(\frac{4x^3y^4}{x}\right)^{\frac{1}{2}}$$

Which expression is equivalent to $\frac{10q^5w^7}{2w^3} \cdot \frac{4(q^6)^2}{w^{-5}}$ for all values of q and w where the expression is defined?

A $\frac{32q^7}{w}$

B $20q^{17}w^9$

C $32q^7w^9$

D $20qw$

Free Chance to Take a Risk and Make Mistakes

The expression $(x^3)(x^{-17})$ is equivalent to x^n . What is the value of n?

Simplify.

$$(3x^5)^2(x^6)^{\frac{1}{2}}$$

Simplify.

$$\frac{14a^4b^6c^{-10}}{8a^{-2}b^3c^{-5}}$$