



Concept_CW_G8_ Practice Problems on Laws of Exponents

Solve using the laws of exponents :

Which of the following is equivalent to $(x^{\frac{1}{2}})^6$?

A $x^{6\frac{1}{2}}$

B x^3

C $6x^{\frac{1}{2}}$

D $\frac{1}{2}x^6$

Which of the following is equivalent to $(2y^{\frac{2}{3}})^3$?

A $8y^2$

B $2y^2$

C $8y^3$

D $2y^3$

Which of the following is equivalent to $(a^{\frac{2}{3}})^{12}$?

A a^8

B $a^{12\frac{2}{3}}$

C $12a^{\frac{2}{3}}$

D $\frac{2}{3}a^{12}$

Simplify $x^0 \times (x^2)^3 \div (x^2 \times x^{\frac{1}{2}})$

A $x^{3\frac{1}{2}}$

B $x^{8\frac{1}{2}}$

C $x^{2.4}$

D x^3

What is the 4th root of 3^{12} ?

A 9

B 27

C 81

D 243

Simplify $(x^3 \div x^{\frac{1}{2}}) \times (x^{\frac{3}{2}} \div x^0) \times x^7$

A $x^{8\frac{1}{2}}$

B x^{10}

C x^{11}

D $x^{14\frac{1}{2}}$