Solutions – Fractional Indices (A)

Find the value of $8^{\frac{-2}{3}}$

$\dfrac{1}{4}$

Find the value of $32^{\frac{4}{5}}$

16

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

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

Find the value of $81^{\frac{1}{4}}$

3

Simplify $x^{\frac{3}{4}} \div x^{\frac{1}{8}}$

$x^{\frac{5}{8}}$

Simplify $x^{\frac{1}{2}} \times x^{\frac{1}{3}}$

$x^{\frac{5}{6}}$

Solutions – Fractional Indices (B)

Find the value of $81^{\frac{1}{4}}$

3

Simplify $x^{\frac{3}{4}} \div x^{\frac{1}{8}}$

$x^{\frac{5}{8}}$

Find the value of $27^{\frac{2}{3}}$

9

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

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

Simplify $x^{\frac{1}{2}} \times x^{\frac{1}{3}}$

$x^{\frac{5}{6}}$

Find the value of $81^{\frac{-3}{4}}$

$\dfrac{1}{27}$

Solutions – Fractional Indices (C)

Simplify $x^{\frac{3}{4}} \div x^{\frac{1}{8}}$

$x^{\frac{5}{8}}$

Find the value of $32^{\frac{-4}{5}}$

$\dfrac{1}{16}$

Simplify $x^{\frac{1}{2}} \times x^{\frac{1}{3}}$

$x^{\frac{5}{6}}$

Find the value of $16^{\frac{3}{4}}$

8

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

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

Find the value of $16^{\frac{1}{4}}$

2

Solutions – Fractional Indices (D)

Find the value of $16^{\frac{-3}{4}}$

$\dfrac{1}{8}$

Find the value of $25^{\frac{1}{2}}$

5

Simplify $x^{\frac{1}{2}} \times x^{\frac{1}{3}}$

$x^{\frac{5}{6}}$

Simplify $x^{\frac{3}{4}} \div x^{\frac{1}{8}}$

$x^{\frac{5}{8}}$

Find the value of $16^{\frac{3}{4}}$

8

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

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

Solutions – Fractional Indices (E)

Simplify $x^{\frac{3}{4}} \div x^{\frac{1}{8}}$

$x^{\frac{5}{8}}$

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

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

Find the value of $8^{\frac{2}{3}}$

4

Find the value of $16^{\frac{1}{4}}$

2

Simplify $x^{\frac{1}{2}} \times x^{\frac{1}{3}}$

$x^{\frac{5}{6}}$

Find the value of $8^{\frac{-2}{3}}$

$\dfrac{1}{4}$

Solutions – Fractional Indices (F)

Simplify $x^{\frac{1}{2}} \times x^{\frac{1}{3}}$

$x^{\frac{5}{6}}$

Find the value of $100^{\frac{1}{2}}$

10

Find the value of $64^{\frac{-2}{3}}$

$\dfrac{1}{16}$

Find the value of $32^{\frac{4}{5}}$

16

Simplify $x^{\frac{3}{4}} \div x^{\frac{1}{8}}$

$x^{\frac{5}{8}}$

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

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

Solutions – Fractional Indices (G)

Find the value of $27^{\frac{-2}{3}}$

$\dfrac{1}{9}$

Find the value of $32^{\frac{4}{5}}$

16

Find the value of $64^{\frac{1}{2}}$

8

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

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

Simplify $x^{\frac{3}{4}} \div x^{\frac{1}{8}}$

$x^{\frac{5}{8}}$

Simplify $x^{\frac{1}{2}} \times x^{\frac{1}{3}}$

$x^{\frac{5}{6}}$

Solutions – Fractional Indices (H)

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

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

Find the value of $81^{\frac{1}{4}}$

3

Simplify $x^{\frac{1}{2}} \times x^{\frac{1}{3}}$

$x^{\frac{5}{6}}$

Find the value of $81^{\frac{-3}{4}}$

$\dfrac{1}{27}$

Simplify $x^{\frac{3}{4}} \div x^{\frac{1}{8}}$

$x^{\frac{5}{8}}$

Find the value of $32^{\frac{4}{5}}$

16

Solutions – Fractional Indices (I)

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

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

Simplify $x^{\frac{1}{2}} \times x^{\frac{1}{3}}$

$x^{\frac{5}{6}}$

Simplify $x^{\frac{3}{4}} \div x^{\frac{1}{8}}$

$x^{\frac{5}{8}}$

Find the value of $16^{\frac{3}{4}}$

8

Find the value of $27^{\frac{-2}{3}}$

$\dfrac{1}{9}$

Find the value of $64^{\frac{1}{3}}$

4

Solutions – Fractional Indices (J)

Find the value of $16^{\frac{-3}{4}}$

$\dfrac{1}{8}$

Find the value of $27^{\frac{1}{3}}$

3

Simplify $x^{\frac{1}{2}} \times x^{\frac{1}{3}}$

$x^{\frac{5}{6}}$

Find the value of $16^{\frac{3}{4}}$

8

Simplify $x^{\frac{3}{4}} \div x^{\frac{1}{8}}$

$x^{\frac{5}{8}}$

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

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