

Calculate; leaving your answers as fractions where necessary.

1). $64^{1/3}$ 2). $25^{1/2}$ 3). $9^{1/2}$

4). $125^{-1/3}$ 5). $81^{-1/2}$ 6). $144^{-1/2}$

16). $\left(\frac{4}{9}\right)^{1/2}$ 17). $\left(\frac{27}{125}\right)^{-1/3}$ 18). $\left(\frac{343}{125}\right)^{-1/3}$

26). $0.25^{1/2}$ 27). $0.027^{-1/3}$ 28). $0.64^{1/2}$

Five Quick Questions

1). Evaluate 3^{-4}

2). Evaluate $\left(-\frac{1}{5}\right)^{-2}$

3). Evaluate $64^{2/3}$

4). Evaluate $25^{-3/2}$

5). Evaluate $\left(\frac{125}{64}\right)^{-2/3}$



Simplify these expressions to the form given.

$$x^{-2} \times \frac{1}{(6x^4)^{-3}} = \boxed{} x^{\boxed{}} \quad [2]$$

$$\frac{\sqrt[3]{(729x^2)}}{\sqrt[6]{x}} = \boxed{} \quad [2]$$

$$\sqrt{(81x^8)} = \boxed{} x^{\boxed{}} \quad [2]$$

$$\frac{12\sqrt[5]{x}}{(32x)^{1/5}} = \boxed{} \quad [2]$$



Calculate the length of side length a.

