

Powers and Roots Worksheet Answer Key

We've Got the Power (and the Root)!

$$\begin{aligned} 1. \quad & 3^2 + 4^0 \\ & = 9 + 1 = 10 \end{aligned}$$

$$\begin{aligned} 6. \quad & \left(\frac{2}{3}\right)^{-1} \\ & = \frac{1}{\frac{2}{3}} = \frac{3}{2} \end{aligned}$$

$$\begin{aligned} 2. \quad & 2^3 + 4^2 \\ & = 8 + 16 = 24 \end{aligned}$$

$$\begin{aligned} 7. \quad & (-6)^2 + 6^1 + 6^0 \\ & = 36 + 6 + 1 = 43 \end{aligned}$$

$$\begin{aligned} 3. \quad & 10^2 + 8^2 \\ & = 100 + 64 = 164 \end{aligned}$$

$$\begin{aligned} 8. \quad & \left(\frac{4}{8}\right)^3 \\ & = \left(\frac{1}{2}\right)^3 = \frac{1}{2^3} = \frac{1}{8} \end{aligned}$$

$$\begin{aligned} 4. \quad & (-3)^3 + 2^0 \\ & = -27 + 1 = -26 \end{aligned}$$

$$\begin{aligned} 9. \quad & \sqrt{(8+56)} \\ & = \sqrt{64} = 8 \end{aligned}$$

$$\begin{aligned} 5. \quad & \left(\frac{3}{4}\right)^2 \\ & = \left(\frac{3}{4}\right)\left(\frac{3}{4}\right) = \frac{9}{16} \end{aligned}$$

$$\begin{aligned} 10. \quad & \sqrt{\frac{1}{81}} \\ & = \frac{\sqrt{1}}{\sqrt{81}} = \frac{1}{9} \end{aligned}$$

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