Instructions

Welcome to your math worksheet on square roots! Follow the steps below to understand how to calculate square roots. Complete the practice problems at the end for extra practice!

Understanding Square Roots

The square root of a number is a value that, when multiplied by itself, gives the original number. The square root symbol is √. For example:

- √9 = 3 (because 3 x 3 = 9)
- √16 = 4 (because 4 x 4 = 16)
- √25 = 5 (because 5 x 5 = 25)

Here are different methods to calculate square roots:

- **Method 1:** Factorization - Break down the number into its prime factors, group them in pairs, and multiply one number from each pair.
- **Method 2:** Use a calculator - Most scientific calculators have a square root function.
- **Method 3:** Estimate - Find the two perfect squares between which your number falls and estimate accordingly.

Practice Problems

Now it's time to practice! Solve the following square roots:

1. √36 = _____
2. √49 = _____
3. √64 = _____
4. √81 = _____
5. √100 = _____

Advanced Problems

If you're feeling confident, try these more challenging problems:

1. √144 = _____
2. √225 = _____
3. √49 x √9 = _____
4. Estimate √50: Between which two integers does it fall? _____
5. What is the square root of 0.25? _____

Reflect

Write a few sentences about how you can apply the concept of square roots in real life: