

Steps for Simplifying Radicals

1. Write the prime factorization of your radicand.
2. Determine the index of the radical.
3. If the index is 2, circle groups of 2 identical numbers or variables. If the index is 3, circle groups of 3 identical numbers or variables, etc.
4. The number or variable from each circled group will show up outside the radical symbol 1 time.
5. Anything left uncircled will remain under the radical. If everything under the radical symbol is circled, the radical symbol will disappear.
6. Multiply the numbers and variables outside the radical together.

Steps for Simplifying Radicals

1. Write the prime factorization of your radicand.
2. Determine the index of the radical.
3. If the index is 2, circle groups of 2 identical numbers or variables. If the index is 3, circle groups of 3 identical numbers or variables, etc.
4. The number or variable from each circled group will show up outside the radical symbol 1 time.
5. Anything left uncircled will remain under the radical. If everything under the radical symbol is circled, the radical symbol will disappear.
6. Multiply the numbers and variables outside the radical together.