1. Multiply. Simplify wherever possible.



2. Solve. Simplify your Answer. Type an integer or a fraction. Use a comma to separate answers. Type N if the solution is not a real number.



3. Simplify by factoring. Assume that all expressions under radicals represent nonnegative numbers. Type an exact answer, using radicals as needed.



4. Multiply and simplify by factoring. Type an exact answer, using radicals as needed.



5. Rewrite with rational exponents. Simplify your answer.



6. Simplify. Type an integer or a fraction.



9. Find the following. Assume that variables can represent any real number.



10. Divide. Then simplify by taking roots, if possible. Assume all expressions under radicals represent positive numbers. Type an exact answer, using radicals as needed.



12. Simplify by taking roots of the numerator and denominator.



13. Multiply and simplify. Assume that all expressions under the radicals represent nonnegative numbers.



15. Add or subtract. Simplify by collecting like radical terms, if possible. Type an exact answer, using radicals as needed.



19. Add. Simplify by collecting like radical terms if possible, assuming that all expressions under radicals represent nonnegative numbers.



20. Multiply. Type exact answer, using radicals as needed.



22. Multiply. Type an exact answer, using radicals as needed.



23. Add. Simplify by collecting like radical terms if possible.

