

High School Math Problems  
2017  
Week 16  
Problem

Simplify the expression

$$\mathcal{V} = \sqrt{2 + \sqrt{3}} \cdot \sqrt{2 + \sqrt{2 + \sqrt{3}}} \cdot \sqrt{2 + \sqrt{2 + \sqrt{2 + \sqrt{3}}}} \cdot \sqrt{2 - \sqrt{2 + \sqrt{2 + \sqrt{3}}}}$$