

Simplify the following:

1. $\sqrt{3} \times 2\sqrt{5}$

2. $\sqrt{2}(1 + \sqrt{3})$

3. $\sqrt{250}$

4. $2\sqrt{3} + 5\sqrt{3} - \sqrt{3}$

5. $\sqrt{50} + 3\sqrt{2} - \sqrt{32}$

6. $\frac{\sqrt{25}}{\sqrt{4}}$

7. $\sqrt{\frac{300}{75}}$

8. Write with a rational denominator $\frac{2 + \sqrt{3}}{\sqrt{3}}$

9. Evaluate

(i) $27^{\frac{2}{3}}$

(ii) $36^{\frac{3}{2}}$