1. Simplify $\sqrt{72} + \sqrt{800} - \sqrt{18}$.   1

2. State with reasons whether $\sqrt{20} \times \sqrt{45}$ is a surd or not?   1

3. Simplify $\left(\sqrt{13} + \sqrt{5}\right)\left(\sqrt{13} - \sqrt{5}\right)$.   1

4. Simplify $\sqrt{125} \times \sqrt{5}$.   1

5. Find the value of $\sqrt{\left(3^{-2}\right)}$.   1

6. Which is the greatest among $\sqrt{2}$, $\sqrt[3]{4}$ and $\sqrt[4]{3}$?   1

7. Simplify $(\sqrt{3} - \sqrt{7})^2$.   1

8. Simplify $(\sqrt{3} + \sqrt{5})(3 - \sqrt{5})$.   1

9. Simplify $\sqrt[4]{81} - 8(\sqrt[3]{216}) + 15(\sqrt[5]{32}) + \sqrt{225}$.   2

10. Simplify $8\sqrt{242} - 5\sqrt{50} + 3\sqrt{98}$.   2

11. Simplify $3\sqrt[3]{40} - 4\sqrt[3]{320}$.   2

12. Find: (i) $\sqrt[4]{\sqrt[3]{2^2}}$ (ii) $2\sqrt[5]{\sqrt[4]{(2^3)^4}}$ 2

13. Find the value of (i) $\sqrt{(144)^{-2}}$ (ii) $\sqrt{(3)^{-2}}$ 2

14. Simplify $\sqrt[3]{2} \times \sqrt[4]{3}$.   2

15. Simplify $12\sqrt{18} - 6\sqrt{20} - 3\sqrt{50} + 8\sqrt{45}$.   2

16. Evaluate $\sqrt[4]{12} \times \sqrt[7]{6}$.   2

17. Represent $\sqrt{17}$ on number line.   3

18. Simplify $3\sqrt{45} - \sqrt{125} + \sqrt{200} - \sqrt{50}$.   3

19. Prove that $\sqrt{3 \times 5^{-3}} \div \sqrt[3]{3^{-1} \times 5} \times \sqrt[6]{3 \times 5^5} = \dfrac{3}{5}$.   3