



Radicals - Adding and Subtracting - Simplification (Values Only)

1 Simplify the radical expressions to prepare for adding or subtracting

$$\sqrt{44} + \sqrt{45} - \sqrt{176}$$

A $2\sqrt{11} + 3\sqrt{5} - 4\sqrt{11}$

B $2\sqrt{11} + \sqrt{8} - 4\sqrt{11}$

2 Simplify the radical expressions to prepare for adding or subtracting

$$\sqrt[3]{54} + \sqrt[3]{54} - \sqrt[3]{189}$$

A $3\sqrt[3]{2} + 3\sqrt[3]{2} - 3\sqrt[3]{7}$

B $2 + 3\sqrt[3]{2} - 3\sqrt[3]{7}$

3 Simplify the radical expressions to prepare for adding or subtracting

$$\sqrt{99} + \sqrt{45} + \sqrt{275}$$

A $\sqrt{10} + \sqrt{5} + 4\sqrt{14}$

B $3\sqrt{11} + 3\sqrt{5} + 5\sqrt{11}$

4 Simplify the radical expressions to prepare for adding or subtracting

$$\sqrt{63} + \sqrt{112} + \sqrt{63}$$

A $3\sqrt{7} + 4\sqrt{7} + 3\sqrt{7}$

B $3\sqrt{5} + 4\sqrt{7} + 3\sqrt{7}$

5 Simplify the radical expressions to prepare for adding or subtracting

$$\sqrt[3]{448} - \sqrt[3]{135} - \sqrt[3]{320}$$

A $4\sqrt[3]{7} - 6\sqrt[3]{5} - 6\sqrt[3]{8}$

B $4\sqrt[3]{7} - 3\sqrt[3]{5} - 4\sqrt[3]{5}$

6 Simplify the radical expressions to prepare for adding or subtracting

$$\sqrt{99} + \sqrt{275} - \sqrt{44}$$

A $3\sqrt{11} + 5\sqrt{11} - 2\sqrt{11}$

B $\sqrt{13} + 6\sqrt{14} - 2\sqrt{11}$

7 Simplify the radical expressions to prepare for adding or subtracting

$$\sqrt[3]{192} + \sqrt[3]{192} - \sqrt[3]{24}$$

A $2\sqrt[3]{6} + 1 - 2\sqrt[3]{3}$

B $4\sqrt[3]{3} + 4\sqrt[3]{3} - 2\sqrt[3]{3}$

8 Simplify the radical expressions to prepare for adding or subtracting

$$\sqrt[3]{128} - \sqrt[3]{448} + \sqrt[3]{448}$$

A $4\sqrt[3]{2} - 4\sqrt[3]{7} + 4\sqrt[3]{7}$

B $4\sqrt[3]{2} - 7\sqrt[3]{5} + 4\sqrt[3]{7}$