FRACTIONS AND RADICALS

1. NO FRACTIONS INSIDE OF A RADICAL
2. NO RADICALS IN DENOMINATOR

(1)

$$\frac{3}{\sqrt{5}}$$

$$\frac{3}{\sqrt{5}} \cdot \frac{\sqrt{5}}{\sqrt{5}}$$

$$\frac{3\sqrt{5}}{\sqrt{5 \cdot 5}}$$

$$\frac{3\sqrt{5}}{5}$$

(2)

$$\frac{7}{\sqrt{28}}$$

$$\frac{7}{\sqrt{2 \cdot 2 \cdot 7}}$$

$$\frac{7}{2\sqrt{7}}$$

$$\frac{7}{2\sqrt{7}} \cdot \frac{\sqrt{7}}{\sqrt{7}}$$

$$\frac{7\sqrt{7}}{2\sqrt{7 \cdot 7}}$$

$$\frac{7\sqrt{7}}{2 \cdot 7}$$

$$\frac{\sqrt{7}}{2}$$

(3)

$$\sqrt{\frac{7}{x}}$$

$$\frac{\sqrt{7}}{\sqrt{x}}$$

$$\frac{\sqrt{7}}{\sqrt{x}} \cdot \frac{\sqrt{x}}{\sqrt{x}}$$

$$\frac{\sqrt{7x}}{\sqrt{x \cdot x}}$$

$$\frac{\sqrt{7x}}{x}$$

(4)

$$\sqrt[3]{\frac{-9}{x}}$$

$$\frac{\sqrt[3]{-9}}{\sqrt[3]{x}}$$

$$-\frac{\sqrt[3]{9}}{\sqrt[3]{x}} \cdot \frac{\sqrt[3]{x \cdot x}}{\sqrt[3]{x \cdot x}}$$

$$-\frac{\sqrt[3]{9 \cdot x \cdot x}}{\sqrt[3]{x \cdot x \cdot x}}$$

$$-\frac{\sqrt[3]{9x^2}}{x}$$

(5)

$$\frac{4}{\sqrt[5]{64x^3}}$$

$$\frac{4}{\sqrt[5]{2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot x \cdot x}}$$

$$\frac{4}{2\sqrt[5]{2xxx}}$$

$$\frac{2}{\sqrt[5]{2xxx}} \cdot \frac{\sqrt[5]{2 \cdot 2 \cdot 2 \cdot 2 \cdot x \cdot x}}{\sqrt[5]{2 \cdot 2 \cdot 2 \cdot 2 \cdot x \cdot x}}$$

$$\frac{2\sqrt[5]{16x^2}}{2x}$$

$$\frac{\sqrt[5]{16x^2}}{x}$$