

$$\int \frac{\sqrt[3]{x} + 2x^2 - 3}{\sqrt[3]{x^2}} dx =$$

$$\int \frac{\sqrt[3]{x}}{\sqrt[3]{x^2}} dx + \int \frac{2x^2}{\sqrt[3]{x^2}} dx - \int \frac{3}{\sqrt[3]{x^2}} dx =$$

$$\int \frac{x^{\frac{1}{3}}}{x^{\frac{2}{3}}} dx + \int \frac{2x^2}{x^{\frac{2}{3}}} dx - \int \frac{3}{x^{\frac{2}{3}}} dx =$$

$$\int x^{-\frac{1}{3}} dx + 2 \int x^{\frac{4}{3}} dx - 3 \int x^{-\frac{2}{3}} dx =$$

$$\frac{x^{\frac{2}{3}}}{\frac{2}{3}} + 2 \frac{x^{\frac{7}{3}}}{\frac{7}{3}} - \frac{3x^{\frac{1}{3}}}{\frac{1}{3}} + C =$$

$$\frac{3\sqrt[3]{x^2}}{2} + \frac{6\sqrt[3]{x^7}}{7} - 9\sqrt[3]{x} + C =$$

$$\boxed{\frac{3\sqrt[3]{x^2}}{2} + \frac{6x^2\sqrt[3]{x}}{7} - 9\sqrt[3]{x} + C}$$