

$$\int \sin^{\frac{n}{3}}(x) dx =$$

$$\left(\frac{3}{44} \cos(3x) - \frac{111 \cos(x)}{220} \right) \sin^{\frac{2}{3}}(x) - \frac{16 \cos(x) {}_2F_1\left(\frac{1}{2}, \frac{2}{3}; \frac{3}{2}; \cos^2(x)\right) \sin^{\frac{2}{3}}(x)}{55 \sqrt[3]{\sin^2(x)}}$$