

1. $\int dx \sqrt{x^3 + x^4};$
2. $\int dx \frac{\sqrt{x}}{(1 + \sqrt[3]{x})^2};$
3. $\int dx \frac{1 - \sqrt{x}}{1 + \sqrt[3]{x}};$
4. $\int dx \frac{7x^{\frac{1}{3}} + 4}{x^{\frac{6}{5}}(1 + 3x^{\frac{1}{3}})^{\frac{3}{4}}};$
5. $\int dx \frac{x^{\frac{1}{10}}(41x^{\frac{5}{3}} + 22)}{(1 + 3x^{\frac{5}{3}})^{\frac{5}{4}}};$
6. $\int dx \frac{22x + 37\sqrt{x}}{\sqrt[4]{\sqrt[3]{x} + \frac{1}{\sqrt[6]{x}}}(\sqrt{x} + 1)^2};$
7. $\int dx \frac{\left(\frac{1}{\sqrt[6]{x}} + 1\right)^{3/4} (8\sqrt[6]{x} + 13)}{24(\sqrt[6]{x} + 1)^3 \sqrt[3]{x}};$