

$$\frac{1}{(757)} \int \frac{3}{x^2} dx = -\frac{3}{x} + C$$

$$\frac{2}{(757)} \int (x - \frac{2}{x^2}) dx = \frac{x^2}{2} + \frac{2}{x} + C$$

$$\frac{3}{(777)} \int (\frac{1}{2}x^2 + \frac{5}{x^2}) dx = \frac{x^3}{6} - \frac{5}{x} + C$$

$$\frac{4}{(777)} \int (x + \frac{1}{x})^2 dx = \int (x^2 + 2 + \frac{1}{x^2}) dx = \frac{x^3}{3} + 2x - \frac{1}{x} + C$$

$$\frac{5}{(777)} \int (x^2 - 1)(1 + \frac{1}{x^2}) dx = \int (x^2 + 1 - 1 - \frac{1}{x^2}) dx = \frac{x^3}{3} + \frac{1}{x} + C$$

$$\frac{6}{(777)} \int \frac{4x^3 - 2x^2 + 3}{x^2} dx = \int (4x - 2 + \frac{3}{x^2}) dx = \frac{4x^2}{2} - 2x - \frac{3}{x} + C = 2x^2 - 2x - \frac{3}{x} + C$$

$$\frac{7}{(777)} \int \frac{1}{(x-5)^2} dx = -\frac{1}{x-5} + C$$

$$\frac{8}{(777)} \int (-\frac{2}{(4x-1)^2}) dx = \frac{2}{4} \cdot \frac{1}{(4x-1)} + C = \frac{1}{2(4x-1)} + C$$

$$\frac{9}{(777)} \int \frac{-12}{(5-3x)^2} dx = \frac{1}{-3} \cdot \frac{+12}{(5-3x)} + C = \frac{-4}{5-3x} + C$$

$$\frac{10}{(777)} \int (-\frac{2}{x^3}) dx = \frac{1}{-2} \cdot \frac{-2}{x^2} + C = \frac{1}{x^2} + C$$

$$\frac{11}{(777)} \int (2x - \frac{8}{x^5}) dx = \frac{2x^2}{2} + \frac{8}{4 \cdot x^4} + C = x^2 + \frac{2}{x^4} + C$$

$$\frac{12}{(777)} \int (\frac{3}{x^4} - \frac{1}{x^3}) dx = \frac{-3}{3 \cdot x^3} + \frac{1}{2x^2} + C = -\frac{1}{x^3} + \frac{1}{2x^2} + C$$

$$\frac{13}{(777)} \int \frac{2}{(x+1)^3} dx = -\frac{2}{2(x+1)^2} + C = -\frac{1}{(x+1)^2} + C$$

$$\frac{14}{(777)} \int \frac{-6}{(2x-4)^4} dx = \frac{-6}{3 \cdot 2(2x-4)^3} + C = \frac{-1}{(2x-4)^3} + C$$

$$\frac{15}{(777)} \int \frac{5}{(3x-1)^6} dx = \frac{5}{-3 \cdot 5(3x-1)^5} + C = \frac{-1}{3(3x-1)^5} + C$$