

$$\begin{aligned}
 9. \int \frac{1}{(5x)^3} dx &= \frac{1}{125} \cdot \frac{x^{-3+1}}{-3+1} + C \\
 &= \frac{1}{125} \cdot \frac{x^{-2}}{-2} + C \\
 &= \frac{x^{-2}}{-250} + C \\
 &= \frac{1}{-250x^2} + C \\
 &= \frac{1}{125} \int x^{-3} dx \\
 &= \int \frac{1}{5^3} \cdot \frac{1}{x^3} dx \\
 &= \int \frac{1}{125} \cdot \frac{1}{x^3} dx \\
 &= \frac{1}{125} \int x^{-3} dx
 \end{aligned}$$

$$\begin{aligned}
 10. \int (5x^3 - 7x^2 + 2x - 1) dx &= \frac{5x^4}{4} - \frac{7x^3}{3} + \frac{2x^2}{2} - x + C \\
 &= \frac{5}{4}x^4 - \frac{7}{3}x^3 + x^2 - x + C
 \end{aligned}$$

$$\begin{aligned}
 11. \int \frac{5x^4 - 2}{x^4} dx &= \int \left(\frac{5x^4}{x^4} - \frac{2}{x^4} \right) dx \\
 &= \int (5 - 2x^{-4}) dx
 \end{aligned}$$

$$\begin{aligned}
 &= 5x - 2 \cdot \frac{x^{-4+1}}{-4+1} + C \\
 &= 5x - 2 \cdot \frac{x^{-3}}{-3} + C \\
 &= 5x + \frac{2x^{-3}}{3} + C \\
 &= 5x + \frac{2}{3x^3} + C
 \end{aligned}$$

$$12. \int \frac{3x-5}{\sqrt{x}} dx$$

$$\int \frac{3x-5}{x^{1/2}} dx$$

$$\int \left(\frac{3x}{x^{1/2}} - \frac{5}{x^{1/2}} \right) dx$$

$$\int (3x^{1/2} - 5x^{-1/2}) dx$$

$$\frac{3x^{1/2+1}}{1/2+1} - 5 \frac{x^{-1/2+1}}{-1/2+1} + C$$

$$\frac{3x^{3/2}}{3/2} - 5 \cdot \frac{x^{1/2}}{1/2} + C$$

$$\frac{2}{3} \cdot 3x^{3/2} - 5 \cdot \frac{2}{1} \cdot x^{1/2} + C$$

$$2x^{3/2} - 10x^{1/2} + C$$