1. **Evaluate each indefinite integral**

   1. $\int 10x^4\,dx$

      Solution: $\dfrac{10x^5}{5} = 2x^5$

   2. $\int 16x^3\,dx$

      Solution: $\dfrac{16x^4}{4} = 4x^4$

   3. $\int -2x^{-3}\,dx$

      Solution: $\dfrac{-2x^{-2}}{-2} = x^{-2}$

   4. $\int -3x^{-4}\,dx$

      Solution: $\dfrac{-3x^{-3}}{-3} = x^{-3}$

   5. $\int \dfrac{9x^{\frac{5}{4}}}{4}\,dx$

      Solution: $\dfrac{9x^{\frac{9}{4}}}{9} = x^{\frac{9}{4}}$

   6. $\int -\dfrac{25x^{\frac{2}{3}}}{3}\,dx$

      Solution: $\dfrac{-25x^{\frac{5}{3}}}{5} = -5x^{\frac{5}{3}}$

   7. $\int -\dfrac{9}{x^4}\,dx$

      Solution: $\dfrac{9x^{-3}}{3} = -3x^{-3}$

8. $\int -\dfrac{3}{x^2} \, dx$

Solution: $\dfrac{3x^{-1}}{-1} = \dfrac{3}{x}$

9. $\int \dfrac{10\sqrt[3]{x^2}}{3} \, dx$

Solution: $\dfrac{10x^{\frac{5}{3}}}{5} = 2x^{\frac{5}{3}}$

10. $\int \dfrac{25\sqrt[4]{x}}{4} \, dx$

Solution: $\dfrac{25x^{\frac{5}{4}}}{5} = 5x^{\frac{5}{4}}$

11. $\int \dfrac{2(5x^8 + 3)}{x^4} \, dx$

Solution: $\int 10x^4 + \dfrac{6}{x^4} \, dx = 2x^5 - \dfrac{2}{3x^3}$

12. $\int \dfrac{2(2x^7 + 3)}{x^4} \, dx$

Solution: $\int 4x^3 + \dfrac{6}{x^4} \, dx = x^4 - \dfrac{2}{x^3}$

13. $\int \dfrac{5(-6x^7 - 1)}{x^2} \, dx$

Solution: $\int -30x^5 - \dfrac{5}{x^2} \, dx = -5x^6 + \dfrac{5}{x}$

14. $\int \dfrac{3(2x^6 - 5)}{x^4} \, dx$

Solution: $\int 6x^2 - \dfrac{15}{x^4} \, dx = 2x^3 + \dfrac{5}{x^3}$

15. $\int \dfrac{6(20x^9 + 3x^4\sqrt[5]{x} - 5)}{5x^4} \, dx$

Solution: $\displaystyle \int 24x^5 + \frac{18x^{\frac{9}{5}}}{5} - \frac{6}{x^4}\,dx = 4x^6 + \frac{10x^{\frac{14}{5}}}{7} + \frac{2}{3x^3}$

16. $\displaystyle \int \frac{-2x^5 + 8x - 15}{x^4}\,dx$

Solution: $\displaystyle \int -2x + \frac{8}{x^3} - \frac{15}{x^4}\,dx = -x^2 - \frac{4}{x^2} + \frac{5}{x^3}$

17. $\displaystyle \int \frac{160x^2 x^{\frac{5}{3}} + 135x^2 x^{\frac{5}{4}} - 48}{12x^2}\,dx$

Solution: $\displaystyle \int \frac{160x^{\frac{11}{3}}}{12} + \frac{135x^{\frac{13}{4}}}{12} - 4\,dx = \frac{40x^{\frac{14}{3}}}{21} + \frac{45x^{\frac{17}{4}}}{34} - 4x$

18. $\displaystyle \int \frac{240x^3 - 21\sqrt[5]{x^2} + 100\sqrt[3]{x}}{15}\,dx$

Solution: $\displaystyle \int 16x^3 - \frac{7x^{\frac{7}{5}}}{5} + \frac{20x^{\frac{4}{3}}}{3}\,dx = 4x^4 - \frac{25x^{\frac{12}{5}}}{12} + \frac{15x^{\frac{7}{3}}}{7}$

19. $\displaystyle \int 2\sec x \tan x\,dx$

Solution: $2\sec x$

20. $\displaystyle \int 4\sin x\,dx$

Solution: $-4\cos x$