1. What is $\int \frac{6}{7} \cos(2-7x)\,dx$?

- ○ $6\sin(2-7x)+\text{constant}$
- ○ $-6\sin(2-7x)+\text{constant}$
- ○ $-\frac{6}{7}\sin(2-7x)+\text{constant}$
- ● **$-\frac{6}{49}\sin(2-7x)+\text{constant}$**

2. Find the integral of $\frac{1}{2\sqrt{6t-5}}$ with respect to t.

- ● **$\frac{1}{6}\sqrt{6t-5}+\text{constant}$**
- ○ $\sqrt{6t-5}+\text{constant}$
- ○ $-\frac{1}{24(6t-5)^{3/2}}+\text{constant}$
- ○ $6\sqrt{6t-5}+\text{constant}$

3. Find the integral of $\frac{4}{9}\sin(7t+4)$ with respect to t.

- ○ $-\frac{28}{9}\cos(7t+4)+\text{constant}$
- ● **$-\frac{4}{63}\cos(7t+4)+\text{constant}$**
- ○ $-\frac{4}{9}\cos(7t+4)+\text{constant}$
- ○ $\frac{28}{9}\cos(7t+4)+\text{constant}$

4. What is $\int \frac{3}{4}\sqrt{7t-3}\,dt$?

- ● **$\frac{1}{14}(7t-3)^{3/2}+\text{constant}$**
- ○ $\frac{3}{8\sqrt{7t-3}}+\text{constant}$
- ○ $\frac{7}{2}(7t-3)^{3/2}+\text{constant}$
- ○ $\frac{1}{2}(7t-3)^{3/2}+\text{constant}$

5. What is $\int \frac{7}{4(5x-6)^2}\,dx$?

- ● **$-\frac{7}{20(5x-6)}$ + constant**
- ○ $-\frac{7}{4(5x-6)}$ + constant
- ○ $-\frac{7}{2(5x-6)^3}$ + constant
- ○ $-\frac{35}{4(5x-6)}$ + constant

6. What is $\int \frac{4}{7}\sqrt{5x-3}\,dx$?

- ○ $\frac{8}{21}(5x-3)^{3/2}$ + constant
- ○ $\frac{40}{21}(5x-3)^{3/2}$ + constant
- ○ $\frac{10}{7\sqrt{5x-3}}$ + constant
- ● **$\frac{8}{105}(5x-3)^{3/2}$ + constant**

7. Find the integral of $\frac{5}{3(6t-2)}$ with respect to t.

- ○ $-\frac{5}{18(6t-2)^2}$ + constant
- ○ $10\ln|6t-2|$ + constant
- ● **$\frac{5\ln|6t-2|}{18}$ + constant**
- ○ $\frac{5\ln|6t-2|}{3}$ + constant

8. What is $\int \frac{1}{3}\cos(6-6t)\,dt$?

- ○ $-2\sin(6-6t)$ + constant
- ○ $-\frac{1}{3}\sin(6-6t)$ + constant
- ● **$-\frac{1}{18}\sin(6-6t)$ + constant**
- ○ $2\sin(6-6t)$ + constant

9. Find the integral of $\frac{2}{3}e^{5t-4}$ with respect to t.

- ○ $10\,e^{5t-4}+\text{constant}$
- ○ $\frac{10}{3}e^{5t-4}+\text{constant}$
- ● $\mathbf{\frac{2}{15}e^{5t-4}+\text{constant}}$
- ○ $\frac{2}{3}e^{5t-4}+\text{constant}$

10. Find the integral of $\frac{e^{4t}}{3}$ with respect to t.

- ○ $\frac{5e^{4t}}{12}+\text{constant}$
- ● $\mathbf{\frac{e^{4t}}{12}+\text{constant}}$
- ○ $\frac{4e^{4t}}{3}+\text{constant}$
- ○ $\frac{e^{4t}}{3}+\text{constant}$

11. Find the integral of $\frac{9}{2}\cos(5-5x)$ with respect to x.

- ○ $-\frac{9}{2}\sin(5-5x)+\text{constant}$
- ○ $-\frac{45}{2}\sin(5-5x)+\text{constant}$
- ○ $\frac{9}{10}\sin(5-5x)+\text{constant}$
- ● $\mathbf{-\frac{9}{10}\sin(5-5x)+\text{constant}}$

12. What is $\int\frac{5}{3}\sin(2t)\,dt$?

- ● $\mathbf{-\frac{5}{6}\cos(2t)+\text{constant}}$
- ○ $\frac{5}{6}\cos(2t)+\text{constant}$
- ○ $-\frac{5}{3}\cos(2t)+\text{constant}$
- ○ $-\frac{10}{3}\cos(2t)+\text{constant}$

13. What is $\int \frac{1}{3} e^{5x+1}\, dx$?

- ● **$\frac{1}{15} e^{5x+1}$ +constant**
- ○ $\frac{5}{3} e^{5x+1}$ +constant
- ○ $\frac{1}{3} e^{5x+1}$ +constant
- ○ $\frac{8}{3} e^{5x+1}$ +constant

14. Find the integral of $\frac{6}{7} e^{4t+5}$ with respect to t.

- ○ $\frac{3}{7} e^{4t+5}$ +constant
- ○ $\frac{6}{7} e^{4t+5}$ +constant
- ● **$\frac{3}{14} e^{4t+5}$ +constant**
- ○ $\frac{24}{7} e^{4t+5}$ +constant

15. What is $\int -\frac{7}{4} \sin(6-3t)\, dt$?

- ○ $\frac{7}{12} \cos(6-3t)$ +constant
- ○ $-\frac{7}{4} \cos(6-3t)$ +constant
- ○ $-\frac{21}{4} \cos(6-3t)$ +constant
- ● **$-\frac{7}{12} \cos(6-3t)$ +constant**

16. What is $\int \frac{3}{7} \cos(6t+6)\, dt$?

- ● **$\frac{1}{14} \sin(6t+6)$ +constant**
- ○ $-\frac{1}{14} \sin(6t+6)$ +constant
- ○ $\frac{18}{7} \sin(6t+6)$ +constant
- ○ $\frac{3}{7} \sin(6t+6)$ +constant

17. What is $\int \frac{1}{3}\cos(5t+5)\,dt$?

- ● **$\frac{1}{15}\sin(5t+5)+\text{constant}$**
- ○ $-\frac{1}{15}\sin(5t+5)+\text{constant}$
- ○ $\frac{1}{3}\sin(5t+5)+\text{constant}$
- ○ $\frac{5}{3}\sin(5t+5)+\text{constant}$

18. Find the integral of $\frac{9}{5(4x+4)^2}$ with respect to x.

- ● **$-\frac{9}{20(4x+4)}+\text{constant}$**
- ○ $-\frac{72}{5(4x+4)^3}+\text{constant}$
- ○ $-\frac{9}{5(4x+4)}+\text{constant}$
- ○ $-\frac{36}{5(4x+4)}+\text{constant}$

19. What is $\int \frac{3}{4}\sqrt{7x+4}\,dx$?

- ○ $\frac{7}{2}(7x+4)^{3/2}+\text{constant}$
- ● **$\frac{1}{14}(7x+4)^{3/2}+\text{constant}$**
- ○ $\frac{1}{2}(7x+4)^{3/2}+\text{constant}$
- ○ $\frac{3}{56\sqrt{7x+4}}+\text{constant}$

20. Find the integral of $\frac{8}{3\sqrt{4x-2}}$ with respect to x.

- ○ $-\frac{4}{3(4x-2)^{3/2}}+\text{constant}$
- ● **$\frac{4}{3}\sqrt{4x-2}+\text{constant}$**
- ○ $\frac{64}{3}\sqrt{4x-2}+\text{constant}$
- ○ $\frac{16}{3}\sqrt{4x-2}+\text{constant}$