

3 June  
2016

1.  $\int \frac{2x+3}{(x-2)(x+5)} dx.$

2.  $\int \frac{x dx}{(x+1)(x+2)(x+3)}.$

3.  $\int \frac{x^3+1}{x^3-5x^2+6x} dx.$

4.  $\int \frac{x^4}{x^3+5x^2+4} dx.$

5.  $\int \frac{x^{10} dx}{x^3+x-2}.$

Q 6.  $\int \frac{x dx}{x^3-3x+2}.$

7.  $\int \frac{dx}{(x+1)(x+2)^2(x+3)^2}.$

8.  $\int \frac{dx}{(x+1)(x^2+1)}.$

9.  $\int \frac{x dx}{(x-1)^2(x^2+2x+2)}.$

10.  $\int \frac{dx}{x(1+x)(1+x+x^2)}.$

$\int \frac{dx}{x^2+5x+4}$

$$11. \int \frac{x^4 + 5x^2 + 4}{(x+1)^2} dx$$

$$12. \int \frac{dx}{x^3+1}$$

$$13. \int \frac{dx}{x^4+1}$$

$$14. \int \frac{dx}{(1+x)(1+x^2)(1+x^3)}$$

$$15. \int \frac{x dx}{(x-1)^2(x+1)^2}$$

$$16. \int \frac{dx}{(x^3+1)^2}$$

$$17. \int \frac{dx}{x^5 - x^4 + x^3 - x^2 + x - 1}$$

$$18. \int \frac{dx}{\sqrt{4x^2 + 2x + 1}}$$

$$19. \int \frac{x+4}{\sqrt{6-2x-x^2}} dx$$

$$20. \int \frac{dx}{\sqrt{1-2x-x^2}}$$

$$\sqrt{4x^2+2x+1}$$

$$\begin{matrix} 1 & 1 & -1 & -1 \\ 1 & 0 & 1 & 1 \end{matrix}$$

$$4x^2+2x+1=0$$

$$D=4-$$

$$-x^2-2x+1=0$$

$$D=4+4=8$$

$$-(x^2+2x-1)$$

$$x-$$

