

1. (Eexo76.tex)

$$\frac{3}{2(X-1)} + \frac{1}{2(X+1)} - \frac{2}{X}$$

2. (Efracrat13.tex) $b = \bar{a}$

3. (Efracrat3.tex)

$$a + \frac{b}{X-i} + \frac{c}{X+i} + \frac{d}{(X-j)^2} + \frac{e}{X-j} + \frac{f}{(X-\bar{j})^2} + \frac{g}{X-\bar{j}}$$

4. (Eexo73.tex)

$$X-4 + \frac{10}{X+1} - \frac{10}{(X+1)^2} + \frac{5}{(X+1)^3} - \frac{1}{(X+1)^4}$$

5. (Efracrat22.tex)

$$F = \frac{\widetilde{A}(1)}{(X-1)^n} + \frac{\widetilde{A'}(1)}{(X-1)^{n-1}} + \frac{\widetilde{A^{(2)}}(1)}{2!(X-1)^{n-2}} + \cdots + \frac{\widetilde{A^{(n-1)}}(1)}{(n-1)!(X-1)}$$

6. (Eexo65.tex)

$$\frac{1}{2X} - \frac{1}{X-1} + \frac{1}{2(X-2)}$$

7. (Efracrat7.tex)

$$F = \frac{2}{X+i} + \frac{1}{X+1}$$

8. (Efracrat4.tex)

$$F = \sum_{i=1}^n \frac{1}{X-a_i}$$

9. (Efracrat21.tex)

$$U = X+1, V = -X, F = \frac{X+1}{X^2+X+1} - \frac{X}{X^2+1}$$

10. (Efracrat19.tex)

$$d = -b, f = ib, h = -ib$$

11. (Efracrat14.tex)

$$\frac{1}{X} - \frac{1}{X-1} + \frac{1}{(X-1)^2}$$

12. (Efracrat8.tex)

$$F = \frac{2}{X+i} + \frac{1}{X+1+i}$$

13. (Efracrat5.tex)

$$\sum_{k=0}^{n-1} \frac{\widetilde{A^{(k)}}(a)}{k!(X-a)^{n-k}}$$

14. (Efracrat2.tex)

$$aX + b + \frac{c}{(X+1)^4} + \frac{d}{(X+1)^3} + \frac{e}{(X+1)^2} + \frac{f}{X+1} + \frac{g}{X-1}$$

15. (Efracrat26.tex)

$$\frac{1}{3(X-1)^2} + \frac{2}{9(X-1)} - \frac{2}{9(X+2)}$$

16. (Efracrat20.tex)

$$\frac{\frac{1}{4}}{(X^2+1)^2}$$

17. (Efracrat28.tex)

$$\frac{x^3}{x^2-1} = \frac{8}{3} + \frac{4}{9}(x-2) + o((x-2)^2)$$

$$\frac{\frac{8}{3}}{(X-2)^2} + \frac{\frac{4}{9}}{X-2} + \frac{\frac{1}{2}}{X-1} + \frac{\frac{1}{18}}{X+1}$$

18. (Efracrat11.tex)

$$F = X^2 + 2X + 3 + \frac{1}{(X-1)^2} + \frac{4}{X-1}$$

19. (Efracrat6.tex) $\frac{\lambda}{\mu}$

20. (Efracrat23.tex)

$$\frac{-1}{X^4} + \frac{-1}{X^2} + \frac{\frac{1}{2}}{X-1} + \frac{-\frac{1}{2}}{X+1}$$

21. (Efracrat1.tex)

$$\frac{\widetilde{A}(a)}{\widetilde{B'}(a)(X-a)}$$

22. (Efracrat16.tex)

$$X+2 + \frac{1}{X^2} + \frac{2}{X} + \frac{2}{(X-1)^2} + \frac{1}{X-1}$$

23. (Efracrat29.tex)

$$\frac{\frac{1}{1-t}}{1-X} + \frac{\frac{t}{t-1}}{1-tX}$$

24. (Efracrat9.tex)

$$F = X^2 - 2iX - 3 + \frac{1}{(X+i)^2} + \frac{4i}{X+i}$$

25. (Efracrat25.tex)

$$X+3 - \frac{1}{X-1} + \frac{8}{X-2}$$

26. (Efracrat15.tex)

$$1 - \frac{8}{X-1} + \frac{13}{X-2}$$

27. (Efracrat30.tex)

$$\frac{\frac{2}{3}}{(X+2)^2} - \frac{\frac{1}{9}}{X+2} + \frac{\frac{1}{9}}{X-1}$$

28. (Efracrat18.tex)

$$c = a, e = -a, g = -a$$

29. (Efracrat17.tex)

$$aX + b + \frac{c}{(X-1)^2} + \frac{d}{X-1} + \frac{e}{(X-i)^2} + \frac{f}{X-i} + \frac{g}{(X+1)^2} + \frac{h}{X+1} + \frac{k}{(X+i)^2} + \frac{l}{X+i}$$

30. (Efracrat27.tex)

$$X + 2 + \frac{1}{X^2} + \frac{2}{X} + \frac{2}{(X-1)^2} + \frac{1}{X-1}$$

31. (Efracrat12.tex)

$$a = b$$

32. (Efracrat24.tex)

$$\sum_{k=0}^{n-1} \frac{1}{X - z_k} \qquad \frac{n2^{n-1}}{2^n - 1}$$

33. (Efracrat10.tex)

$$F = X^2 - 2X + 3 + \frac{1}{(X+1)^2} - \frac{4}{X+1}$$