

1. 19: $f(-4) = 16 + 4 - 1 = 19$
2. $-3\sqrt{6}$: $(-3) \& C = -27 + C^2 - 1 = 26 \rightarrow C^2 = 54 \rightarrow C = -3\sqrt{6}$. Remember $C < 0$
3. $-4x^2 - 22x + 148$
4. $x^3 - 8x^2y + 32xy^2 - 64y^3$
5. C
6. 13
7. $-19/7$
8. $\frac{e^2}{81}$
9. $-81/4$; find the minimum value of $f(x) = x(x + 9)$
10. $-309/32$
11. -940
12. $5/12$
13. -3
14. $-18 - 4i$
15. $x = \frac{\sqrt[4]{27}}{3}$; substitute $u = x^4$
16. 5
17. $11/3$
18. 3
19. 27
20. $-1/2$
21. -14
22. -577
23. $x = -5/4$; the solution $x = -5$ is extraneous
24. 54; this is infinite geometric series with $r = \frac{2}{3}$
25. 20