Problem 1a

1. private static int a = 10;
2. private static int b = 20;
3. int b = 2;
4. System.out.println(cmethod(b2) + a10 + b2);
5. public static int cmethod(x2) {
6. int a = 40;
7. return bmethod(x2-1) + a40 + b20;
8. public static int bmethod(y1) {
9. int b = 30;
10. return a10 + b30 + dmethod(y1);
11. public static int dmethod(z1) {
12. int a = z1;
13. return a1 + cmethod(z1);
14. public static int cmethod(x1) {
15. int a = 40;
16. return bmethod(x1-1) + a40 + b20
17. public static int bmethod(y0) {
18. int b = 30;
19. return a10 + b30 + dmethod(y0);
20. public static int dmethod(z0) {
21. int a = z0;
22. return a0 + cmethod(z0);
23. public static int cmethod(x0) {
24. int a = 40;
25. if (x0 == 0) {
26. return a40 + b20; **// returns 60**
27. return a0 + 60; **// line 22 returns 60**
28. return a10 + b30 + 60; **// line 19 returns 100**
29. return 100 + a40 + b20; **// line 16 returns 160**
30. return a1 + 160; **// line 13 returns 161**
31. return a10 + b30 + 161; **// line 10 returns 201**
32. return 201 + a40 + b20; **// line 07 returns 261**
33. print(261 + a10 + b2); **// line 04 prints 273**

**Answer: 273**

Problem 1b

1. private static int a = 10;
2. private static int b = 20;
3. int b = 2;
4. System.out.println(cmethod(b2) + a10 + b2);
5. public static int cmethod(x2) {
6. int a = 40;
7. return bmethod(x2-1) + a40 + b2;
8. public static int bmethod(y1) {
9. int b = 30;
10. return a40 + b30 + dmethod(y1);
11. public static int dmethod(z1) {
12. int a = z1;
13. return a1 + cmethod(z1);
14. public static int cmethod(x1) {
15. int a = 40;
16. return bmethod(x1-1) + a40 + b30
17. public static int bmethod(y0) {
18. int b = 30;
19. return a40 + b30 + dmethod(y0);
20. public static int dmethod(z0) {
21. int a = z0;
22. return a0 + cmethod(z0);
23. public static int cmethod(x0) {
24. int a = 40;
25. if (x0 == 0) {
26. return a40 + b30; **// returns 70**
27. return a0 + 70; **// line 22 returns 70**
28. return a40 + b30 + 70; **// line 19 returns 140**
29. return 140 + a40 + b30; **// line 16 returns 210**
30. return a1 + 210; **// line 13 returns 211**
31. return a40 + b30 + 211; **// line 10 returns 281**
32. return 281 + a40 + b2; **// line 07 returns 323**
33. print(323 + a10 + b2); **// line 04 prints 335**

**Answer: 335**