Answer Key

1. **A**
2. **C**
3. **A**
4. **D**
5. **B**
6. **B**
7. **D**
8. **C**
9. **C**
10. **B**
11. **D**
12. **C**
13. **C**
14. **B**
15. **B**
16. **B**
17. **A**
18. **D**
19. **A**
20. **C**
21. **A**
22. **A**
23. **D**
24. **B**
25. **C**
26. **A**
27. **D**
28. **A**
29. **C**
30. **B**
31. **A**
32. **C**
33. **A**
34. **C**
35. **D**
36. **C**
37. **A**
38. **D**
39. **B**
40. **C**
41. **B**
42. **B**
43. **A**
44. **C**
45. **D**
46. **C**
47. **B**
48. **C**
49. **A**
50. **D**
51. **C**
52. **D**
53. **D**
54. **A**
55. **C**
56. **D**
57. **B**
58. **A**

Answers Explained

1. **(A)** When tracing an algorithm, using a trace table makes keeping track of your variables easier. Notice the display is *c*, then *a*, and then *b*. Don't assume the order is always *a*, *b*, *c*. Always evaluate the right-hand side of the equation first, and then set the value to the variable on the left.

a	*b*	*c*	Output
~~13~~	17	2	2 14 17
14			

2. **(C)** When tracing an algorithm, using a trace table makes keeping track of your variables easier. Although *a* was initially set to 13, it is overwritten in the second line, setting *a* equal to 17. In the third line, 1 is added to *a*, setting it equal to 18.

a	Output
~~13~~	18
~~17~~	
18	