Answer Key

1 Choice (a) (a Type II Error)

2 Choice (a) ($\frac{448}{2187} = 0.20485$)

3 Choice (b) (An incorrect negative against the experimenter's theory)

4 Choice (d) (1. 8484)

5 Choice (a) (6. 25%)

6 Choice (d) (126)

7 Choice (b) (0.19638)

8 Choice (a) (0.96721)

9 Choice (a) (5.9895×10^{-2})

10 Choice (a) (0.375)

11 Choice (b) (5040)

12 Choice (b) (1. 4828)

13 Choice (d) (All of the above answers are correct)

14 Choice (b) (Increase α)

15 Choice (g) (0.64521)

16 Choice (d) (73. 692,86. 708)

17 Choice (b) (4.0)

18 Choice (a) ($\{2,5\}$)

19 Choice (a) (equal to $\Pr(A) + \Pr(B) - \Pr(A \cap B)$)

20 Choice (d) (Stay relaxed but vigilant, knowing that the odds are still about 24 to 1 that your date is not the killer)

21 Choice (c) (3.9994×10^{-4})

22 Choice (b) (0.44)

23 Choice (b) (faster (i.e., at a smaller N) when sampling from a uniform distribution than when sampling from a highly skewed distribution)

24 Choice (b) (–0.10526)

25 Choice (d) (14; 1)

26 Choice (c) (A 2-tailed test of a point hypothesis)

27 Choice (b) (4096)

28 Choice (b) (3.0)

29 Choice (c) (3. 55)

30 Choice (d) (6. 25%)

31 Choice (b) (286)

32 Choice (d) (The null hypothesis would not be rejected)

33 Choice (c) (0.43188)