1. (C)

2. (A)

3. (A) log(10m2) = log 10 + 2 log m = 1 + 2 · = 2.

4. (B) ba = 5, bc = 2.5 = 5x , using the relationships between logs and exponents: (ba )x = bax = 5x = bc . Therefore, ax = c and .

5. (B)

6. (B) Since ln stands for loge, and e > 1, xy < 1.

7. (D) Converting the log expressions to exponential expressions gives and . Therefore, mn = .

8. (D) .

9. (C)

10. (D) Substitute in A = Pe0.03t to get 600 = 300e0.03t. Simplify to get 2 = e0.03t . Then take ln of both sides to get ln 2 = 0.03t and t = . Use your calculator to find that t is approximately 23.