Surname:_____; Given name: _____; Student #: _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question, then transfer your answer to the scantron sheet.

1) Find the percent ionization of a 0.337 mol L^{-1} HF solution. The K_a for HF is 3.5×10^{-4}. 1) _____

A) 3.2%
B) 1.1%
C) 3.5×10^{-2}%
D) 4.7%
E) 1.2×10^{-2}%

2) When titrating a weak monoprotic acid with NaOH at 25 °C, the 2) _____

A) pH will be equal to 7 at the equivalence point.
B) titration will require more moles of base than acid to reach the equivalence point.
C) pH will be greater than 7 at the equivalence point.
D) titration will require more moles of acid than base to reach the equivalence point.
E) pH will be less than 7 at the equivalence point.

3) What is the pH of pure water at 40.0°C if the K_W at this temperature is 2.92×10^{-14}? 3) _____

A) 6.767 B) 7.000 C) 0.465 D) 7.233 E) 8.446