1. Which property applies to the Hessian matrix H (of a function f)? Pick one answer!

   A. It is symmetric ☒
   B. Only the diagonal elements are non-zero ☐
   C. All its elements are always non-zero ☐

2. Consider a 2x2 matrix in which all elements are equal to 1.
   Is this matrix positive definite?

   YES ☐ NO ☒

3. In an iterative method, once the search direction has been found, the problem of finding a suitable step length is one-dimensional.

   TRUE ☒ FALSE ☐