Here are the questions from [6.5 Integrals involved in Gaussian filtering - Quiz]

1. In Matlab you can, for example. also calculate the square-root X of a matrix A
*- using X = sqrtm(A) where then X*X = A.*
*- using [V, D] = eig(A) and setting X = V*sqrt(D) such that X*X' = A*

The adv. of chol(A,'lower') is that i it is fast to compute.
Optional Answers:

2. Which of the following statements is false?
Optional Answers:

1. The Monte Carlo method approximates expected values by sample averages.
2. A sigma-point method makes use of a small number of weighted random samples.
3. Stochastic decoupling: integral w.r.t. vector of correlated random variables => integral w.r.t. vector of unitary indep. random variables.
4. UKF and CKF are both Gaussian filters. They only differ in how they approximate the involved integrals.

Thank You