7) Prediction of partition constants

Question:

Hexadecane / air partition constants of three compounds are given in the following table. Estimate whether the missing partition constants are smaller, equal or higher than the hexadecane/air partition constant.

Note: olive oil is an alkylester, hexadecane is an apolar compound

	benzene	chlorobenzene	phenol
ln $K_{hexadecane/air}$	6.42	8.42	8.67
ln $K_{olive\ oil/air}$	**6.51**	**8.60**	**10.7**
ln $K_{water/air}$	**1.45**	**1.89**	**11.1**

all values in $m_{air}^3 / m_{solvent}^3$