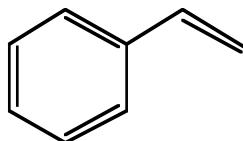
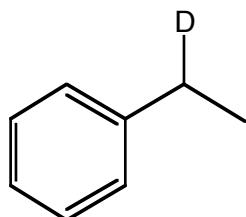


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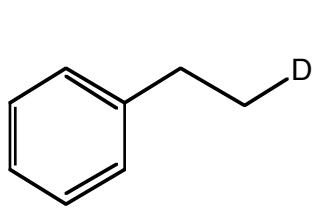
(a) Devise syntheses for the following molecules starting from styrene (**1**), and the list of allowable reagents.



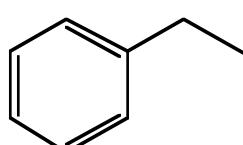
1



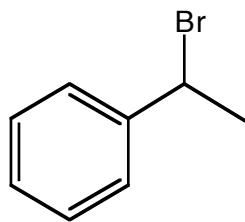
(a)



(b)



(c)

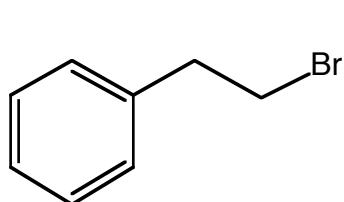


(d)

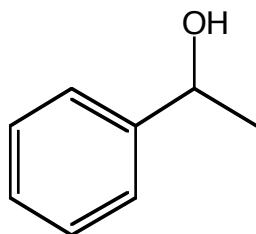
Allowable reagents: Li, Mg, HBr, DBr, H₂O, D₂O, H₂SO₄, D₂SO₄, H₃N, D₃N, HN₃, DN₃,

CH₃OH, CD₃OH, CH₃I, KOH, NaH, DMF, DMSO, (CH₃)₂COD, (CH₃)₃C O⁻ + K, DTox, DFense, Dvious.

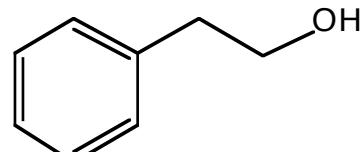
(b) Starting from **2** devise syntheses of the following two alcohols:



2

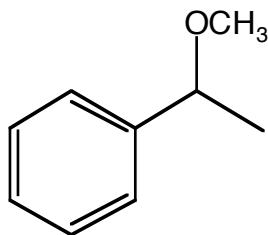


(e)



(f)

(c) Devise two ways of making **3**.



3

(g,h)