

Answers to Problem 60, Chemistry 301X-2006

all from **1**: there are many ways to make some of these targets.

(a) 1. HBr, 2. Li, 3. D₂O

(b) 1. DBr, 2. Li, 3. H₂O

(c) 1. HBr 2. Li 3. H₂O

(d) HBr

(e) 1. *tert*-butoxide (does E2 to make **1**) 2. H₂SO₄/H₂O

(f) KOH/H₂O (S_N2)

(g) 1. CH₃OH/H₂SO₄

(h) 1. product (d) + KOH/H₂O (S_N2) 2. CH₃I

or

1. product (e) + NaH 2. CH₃I