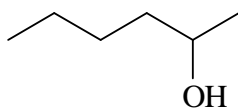
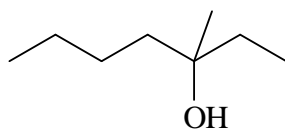
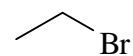


- Devise a synthesis of 3-methylheptan-3-ol using the two starting materials shown. Show the structures of any intermediate products involved, as well as the reagents required for each step. More than one step is required.

Marks
6



and



Would the product be isolated as a racemic mixture or a single enantiomer or is the product achiral?