Chemguide - answers

NITRILES: REDUCTION

- 1. a) LiAlH₄
 - b) The reaction is done in solution in dry ethoxyethane ("ether"), followed by the addition of a dilute acid such as sulphuric acid.

c)
$$CH_3CH_2CN + 4[H]$$
 \longrightarrow $CH_3CH_2CH_2NH_2$

- 2. a) palladium, platinum or nickel (There may well be other catalysts that will work, but always choose obvious examples which examiners will recognise. You can't afford to irritate examiners by forcing them to check obscure examples!)
 - b) CH₃CH₂CH₂CN + 2H₂ CH₃CH₂CH₂CH₂NH₂

If you have written your catalyst over the arrow, that's fine.