How many moles of oxygen will be consumed in the complete combustion of 1 mole of ethanol? The unbalanced equation for this reaction is shown below.

$$C_2H_6O(l) + O_2(g) \rightarrow CO_2(g) + H_2O(g)$$

- (a) 1 mol
- (b) 2 mol
- (c) 3 mol
- (d) 4 mol