3(a)	**Define the term *break-even analysis*** **Indicative content** Responses may include: **AO1 Knowledge and understanding** **CLEAR UNDERSTANDING (2 marks)** • The point where total revenue equals total costs/or where a business makes neither a profit nor a loss (2) • Using cost and revenue data to determine the level of output that needs to be reached to start making a profit (2) • Uses cost and revenue data to determine the break-even level of output (2) • Uses cost and revenue data to calculate the margin of safety (2) Clear understanding of the term (or similar) is worth 2 marks. This is indicated by 2 ticks **PARTIAL UNDERSTANDING (1 mark)** • A way to calculate profitability/or decide on output (1) • Used to determine break-even point (1) • Allows calculation of margin of safety (1) Partial understanding of the term (or similar) is worth 1 mark. This is indicated by 1 tick Accept all valid responses
3(b)	**Explain <u>one</u> limitation for a business of break-even analysis.** **Indicative content** Responses may include: **AO1 Knowledge and understanding – 1 mark for identifying ONE limitation for a business of break-even analysis – put tick in body of script.** • Assumptions may well be unrealistic • May not be accurate • Can be time consuming – deflects a business away from core activities • External factors may undermine the calculations • Assumes all relationships are linear • Sales are unlikely to be the same as output • Variable costs do not always stay the same • Not all costs can be defined as fixed and variable • Most businesses sell more than one product **AO2 Application – 2 marks for DEVELOPED explanation of ONE limitation – put ticks in body of script.** **– 1 mark for LIMITED explanation of a limitation – put tick in body of script.** • Unrealistic assumptions – products are not sold at the same price at different levels of output, fixed costs do vary when output changes • The assumption that costs and revenue are always represented by straight lines is not realistic • Sales may not be the same as output – there may be some build-up of inventory or wasted output – the use of inventory is ignored • Variable costs may well change with output – as output rises the buying power of a business may allow buying of inputs at lower prices which reduces variable cost per unit
3(b)	• Semi- variable costs will make the technique much more complicated • With more than one product the break-even for the business becomes harder to calculate • Break-even charts are only accurate with narrow levels of output – a significant change in output level may result in fixed costs changing – scope of analysis is limited • It is more of a planning aid than a decision-making tool. Accept all valid responses.