**Chapter 2**

**Product costing: Manufacturing processes, cost terminology and cost flows**

**Solutions**

1. (LO2 and 5)

1. Reducing inventory by such a significant amount may negatively affect the company’s ability to deliver to its customers. The company will have to work closely with its suppliers to ensure a steady stream of inventory on a just-in-time basis so that customer needs can be filled quickly.
2. The reduction will likely need to be accomplished by ‘consuming’ the inventory by shipping it to customers as it is ordered without simultaneously replacing the inventory in the company’s warehouse. It is possible that the company could arrange for some suppliers to accept returns of inventory, but this is not likely to be a successful approach with all suppliers.
3. The total inventory is currently valued at $722 505. Assuming an interest rate of just 3.5 per cent, the annual interest received on 80 per cent of this balance is $20 230.14.
4. If Ken’s estimates are correct, there will be a decrease in sales of $760 000 (20% of $3 800 000) and a decrease in gross profits of $228 000 (30% of $760 000).
5. JIT is not for every company, but the techniques may work if the company is committed to them. The primary challenge will be ensuring an orderly transition to a very low inventory. The company will have to work closely with suppliers and customers to ensure that products are available whenever needed. This will likely drive some costs higher because suppliers will almost certainly increase prices to cover the increased costs of more frequent shipments to Colt Kitchen. On the other hand, the company may feel that the price increases will be offset by the income earned on the free cash.

2. (LO3 and 5)

1. Advertising expense is a period expense and should be included in ‘selling and administrative expenses’. By including the advertising in overhead, the company is able to increase product costs which become assets. Only when products are sold are their costs shown on the income statement as cost of goods sold. By including a portion of advertising expense in overhead, the company’s net income is higher in the short run than it would otherwise be.
2. No, for the same reason as advertising expense is not validly part of overhead. Management salaries are properly categorised as a period cost and should be included in ‘selling and administrative expense’.
3. See the answer to A above.