

Solution notes

Computer Design 2005 – Paper 6 Question 2 (SWM)

(a) to (d) Book work.

(e) The mean access latency can be calculated as follows, where s is the second level cache hit rate:

$$meanLatency = 1 \times 80\% + 4 \times 20\% \times s + 104 \times 20\% \times (1 - s)$$

Solving for the case when $meanLatency = 2$ gives $s = 98\%$.

This material is covered in lectures 10 and 11.