VLSI Design

(a) Sketch stick diagrams of memory cells for:

(i) read-only memory;  
(ii) static memory;  
(iii) dynamic memory using standard CMOS;  
(iv) dynamic memory for dense layout.

(b) Extend your design for parts (ii) and (iii) to accommodate four read ports. What would inhibit such an extension for design (iv)?

(c) State two considerations that are becoming increasingly important in memory design as feature sizes decrease.