1999 Problem Set 6 Question 3 (missing in the booklet, the diagrams are in there)

Calculate LOD scores for linkage at $\theta = 0$ between:

(a) The disease and SSR1 in Family 1.
(b) The disease and SSR2 in Family 1.
(c) The disease and SSR1 in Family 2.
(d) The disease and SSR2 in Family 2.
(e) SSR1 and SSR2 in Family 1.
(f) SSR1 and SSR2 in Family 2.

Is it appropriate to add together the LOD scores calculated in:

(g) Parts (a) and (c) of this question? Why or why not?
(h) Parts (c) and (d) of this question? Why or why not?
(i) Parts (e) and (f) of this question? Why or why not?
(j) What conclusion (in terms of genetic linkage) can you and your colleague publish based on these findings?