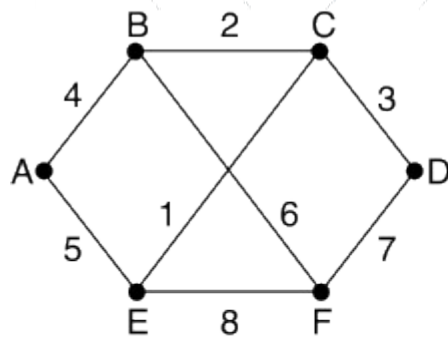


# Homework assignment 2

## Exercise 7.

Consider the network of Fig. 5-12(a). Distance vector routing is used, and the following link state packets have just come in at router D: from A: (B: 5, E : 4); from B: ( A:4, C: 1, F: 5); from C: (B: 3, D: 4, E: 3); from E: (A: 2, C: 2, F : 2); from F : (B: 1, D:2, E: 3). The cost of the links from D to C and F are 3 and 4 respectively. What is D's new routing table? Give both the outgoing line to use and the cost.



(a)

Link		State		Packets	
A	B	C	D	E	F
Seq.	Seq.	Seq.	Seq.	Seq.	Seq.
Age	Age	Age	Age	Age	Age
B 4	A 4	B 2	C 3	A 5	B 6
E 5	C 2	D 3	F 7	C 1	D 7
	F 6	E 1		F 8	E 8

(b)

**Figure 5-12.** (a) A network. (b) The link state packets for this network.