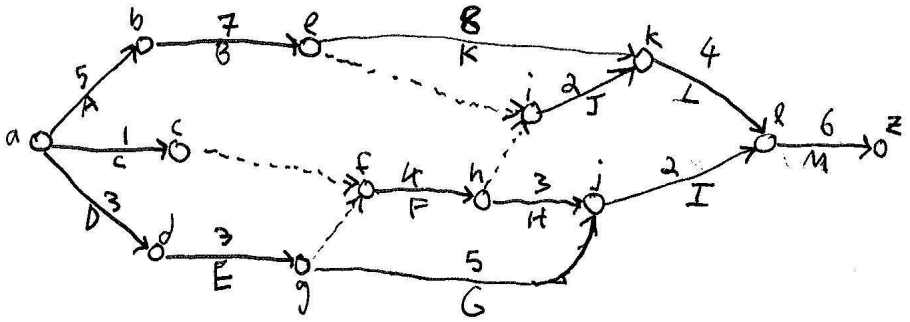
Solutions to Chapter 7 Exercises

7.2 a, e, h, z length= 7

7.5 a, c, d, j, h, l, z length= 68



7.7 1.

2. A, B, K, L, M length= 30

3.

A	B	C	D	E	F	G	H	I	J	K	L	M
0	5	0	0	3	6	6	10	13	12	12	20	24

4.

A	B	C	D	E	F	G	H	I	J	K	L	M
0	5	13	8	11	14	17	19	22	18	12	20	24

5.

A	B	C	D	E	F	G	H	I	J	K	L	M
0	0	13	8	8	8	11	9	9	6	0	0	0

7.11 1. The set of all edges incident with a given vertex is a cutset of size $n-1$, hence the edge-connectivity of K_n is at most $n-1$.

2. The edge-connectivity is no greater than the smallest degree of a vertex in the graph.

7.20 1. 3

2. 2,2

3. for example, vertices $\{x, y, z\}$ edges $\{xy, xy, xy, yz, yz, yz\}$

7.30 value= 25