

Discrete Math 2 HW 4

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Problem 10.2.22.

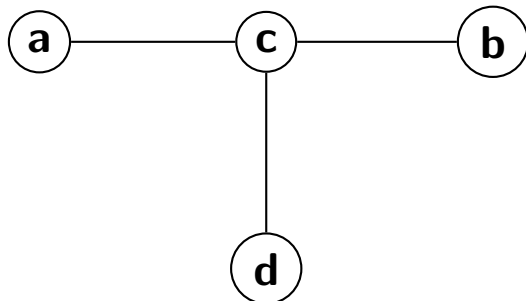
Yes. Group 1: [a, c] Group 2: [b, d, e]

Problem 10.2.24.

Yes. Group 1: [f, c] Group 2: [a, b, e, d]

Problem 10.2.50.

Problem For the graph in 10.2.24, what is the subgraph induced by {a, b, c, d}?.



Problem 10.3.2.

Vertex	Adjacent Vertices
a	b,d
b	a,d,e
c	d,e
d	a,b,c
e	b,c

Problem 10.3.4.

Initial Vertex	Terminal Vertices
a	b,d
b	a,c,d,e
c	c,d
d	a,e
e	e,c

Problem 10.3.6.

		A	B	C	D	E
	A	0	1	0	1	0
	B	1	0	0	1	1
	C	0	0	0	1	1
	D	1	1	1	0	0
	E	0	1	1	0	0

Problem 10.3.8.

		To				
		A	B	C	D	E
From	A	0	1	0	1	0
	B	1	0	1	1	1
	C	0	1	1	0	0
	D	1	0	0	0	1
	E	0	0	1	0	1

Problem 10.3.36.

No: V has a vertex with degree 4 and U does not

Problem 10.3.38.

Yes: $u_2 \rightarrow v_5$

$u_4 \rightarrow v_3$

$u_1 \rightarrow v_1$

$u_5 \rightarrow v_4$

$u_3 \rightarrow v_2$

Problem 10.3.40.

No: V has a vertex with degree 4 and U does not

Problem 10.4.22.

No because H has 2 symmetric rhombuses for paths which G does not have.

Problem 10.4.12.

- a. weak
- b. strong
- c. neither

Problem 10.4.14.

- a. Component 1: a, b, e
- Component 2: d
- Component 3: c
- b.