

Name \_\_\_\_\_

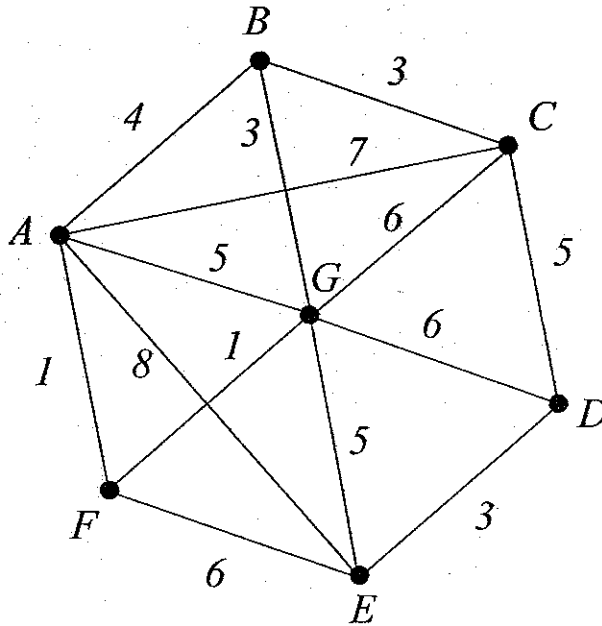
# Mathematics 2602

Quiz 8

Prof. Margalit

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Consider the following weighted graph.



Use Dijkstra's algorithm to find the length of the shortest path from the vertex A to every other vertex.

	The shortest paths	Total weights
$A \rightarrow B$ :	AB	4
$A \rightarrow C$ :	AFG	2
$A \rightarrow F$ :	AF	1
$A \rightarrow G$ :	AFG or ACG	7
$A \rightarrow D$ :	AFGD	8
$A \rightarrow E$ :	AFGE or AFGE	7

Find all paths of shortest length from A to D.

AFGD 8