

Order	Previous Node	Mins 1	Node	Mins 2	Total
1	Depot	0	Depot	0	0
			Garage Forecourt		
			Garda Station		
			Library		
			School		
			Traditional Pub		
			Hotel		
			Train Station		
			Shopping Centre		
			Fire Station		
			Church		
			Hospital		
			Airport		
			Docks		

## Applied Maths

### Dijkstra's Algorithm

#### Transport Logistics - Worksheet

A freight company has an 8 hour window to transport 15 containers from their depot to the local docks before the ship sails. Details of possible routes from the DEPOT to the Dock are shown in figure 2, including the time taken to travel between the various nodes.

**Q.** Calculate the quickest route for the trucks to travel between the DEPOT & DOCKS and determine how many trucks will be required by the company to ensure all 15 containers are on the ship before it leaves the port? It takes 30 mins to load and 30 mins to unload the trucks. You may assume that the return journey takes the same time as the outward journey.

