

Question 6**(8 marks)**

A company has four different models of robotic welders that are used to assemble components that require welding. Each of these welders must be set up to assemble just one type of component. The number of components that each welder can assemble per hour for the three different types of components required is shown below.

		Welders			
Components		A	B	C	D
	1	15	12	13	11
	2	13	16	13	9
	3	15	16	12	14

- (a) Use the Hungarian Algorithm to determine the allocation of welder to component that will maximise the number of components assembled. (6 marks)

- (b) State how many of each component will be produced each hour with the allocation determined in part (a). (2 marks)