Name: Class: Mark:

1. There are four stages in the program development life cycle.

These are shown on the left of the table below. Match each of the tasks on the   
right of the table to the stage which they occur. [4]

|  |  |  |
| --- | --- | --- |
| **Life cycle stage** |  | **Tasks** |
| Analysis |  | Identification of the requirements |
|  | Structure diagrams |
|  | Pseudocode |
| Design |  | Writing program code |
|  | Decomposition |
|  | Flowcharts |
| Coding |  | Iterative testing |
|  | Abstraction |
|  | Identification of the problem |
| Testing |  | Testing with test data |
|  | Decomposition of the problem |
|  |

2. (a) Explain what is meant by the term **abstraction**. [2]

(b) Satnav systems are used in cars to show a driver the streets that they are driving on.

Describe how abstraction is used by the designers of such devices when creating   
their maps. [4]

3. Pseudocode is often created to show how algorithms will work.

Describe **two** differences between pseudocode and a real programming language. [2]

[Total 12 marks]