Review Activity 1

Introduction to Algorithms and Data Structures

1) "An algorithm is a sequence of instructions" as a definition does not address three important aspects/properties of algorithm design. List the three missing aspects/properties.

Aspect1:	Aspect2:	Aspect3:
Finite sequence / Sequence terminates	unambiguous instructions / clearly specified	performed to achieve a goal / run to compute a desired results

2) Data structures play an important role with respect to algorithm design. Explain that role.

Explanation:

- Stores the data used by algorithms
- facilitate the design and use of algorithms that meet efficiency parameters

3) Abstract Data Type (ADT) exposes only the interface (the operations) to external users, and hides the internal organization of data items. Explain two benefits realized through this design.

Benefit1:	Benefit2:
The users of ADT do not understand its inner working in order to use it	There can be several implementation of one ADT as long as the method signatures stay the same