

Tutorial Quiz #2 — Solutions

1. What is the best way to represent an ADT in Java?

Answer: Using an interface.

Marking Scheme:

- A. 1 mark (all-or-nothing)

Common Errors:

2. Complete the following method.

```
/**
 * Adds the next two items in an Iterator and returns their sum.
 * Precondition: the Iterator contains at least two more items
 *               and the next two items in the Iterator are Integers
 * @param <code>i</code> the Iterator
 * @return the sum of the next two items in the Iterator
 */
public static int addTwo(Iterator i) {

    //// ANSWER ////
    return ((Integer)i.next()).intValue() + ((Integer)i.next()).intValue();

} // end addTwo(Iterator)
```

(Hint: Recall that class Integer has a method intValue() that returns an int.)

Marking Scheme:

- B. 1 mark for adding the correct items and returning their sum
C. 1 mark for calling `i.next()` to access the items
D. 1 mark for correctly casting the items to Integer
E. 1 mark for calling `intValue()` on the Integers