Table 4.6: Items and concepts for Exercise 4.5

Concept	*Definition*
a aggregation	1 a relationship between two classes where one is a specialization of another
b association	2 the ability of one operation to be implemented by different methods
c attribute	3 abstracting common features into a superclass
d class	4 code implementing an operation
e data hiding	5 concealing internal details of an object
f encapsulation	6 creation of an object
g generalization	7 data item defined as part of a class or object
h inheritance	8 instance of a class
a instatiation	9 interface of a method
b message	10 packaging together data and operations
c method	11 relationship between classes
d object	12 request for a service to be executed
e operation	13 template for objects
f polymorphism	14 whole-part relationship

4.6 This question relates to the rugby counter example in the section on encapsulation and data hiding. Give a list of all the messages that the object blueSide :Counter can understand.

4.7 Draw diagrams to link the following classes using association, aggregation, inheritance and multiplicity where appropriate.

a hotel room, booking, guest

b club member, adult member, junior member

c exam paper, instruction, question, solution

d animal, mammal, bird, reptile, dog, horse, parrot

e sentence, word, letter, punctuation

f academic staff, lecturer, professor, student.