

****NOTE**** Not all instructions were copied here. Read the Student Guide!

Name: _____

Q2 Write an algorithm in pseudocode that describes the actions necessary to play the Elevens game. I have written the first two lines for you.

```
Create and shuffle the deck;  
Deal nine cards;  
Check if the pair or triplet selected is valid;  
Replace cards from deck and place selected cards to dealt;  
Repeat until no more cards or no available moves;
```

Q3 Does the ElevensBoard class contain all the state and behavior necessary to play the game? It's missing the ability to do something important. What is it?

It's missing the ability to check whether the move made is legal, if another move is possible, and if the cards selected is an 11s pair or a Jack, Queen, King combo.

Q4

a) Where is the dealMyCards method called in ElevensBoard? Which parts of the code call it?

It's called in the constructor method and the newGame method.

b) Which public methods should call the containsPairSum11 and containsJQK methods?

The anotherPlaysPossible and isLegal method should call both of them.

c) Complete the diagram by filling in the elements of the returned list, and by showing how those values index cards. Format your answer as [value1, value2, ..., valueN].

[0,1,3,6,7]

d)

```
public static void printCards(ElevensBoard board) {  
    List<Integer> cIndexes = board.cardIndexes();  
    For (Integer I : cIndexes)  
    {  
        System.out.println(Board.cards[i].toString());  
    }  
}
```

e) **Which one of the methods that you identified in question 4b above needs to call the `cardIndexes` method before calling the `containsPairSum11` and `containsJQK` methods? Why?**

anotherPlaysPossible should call them, since that method has to know which cards are able to be checked/ are present in order to know if another move can be made.