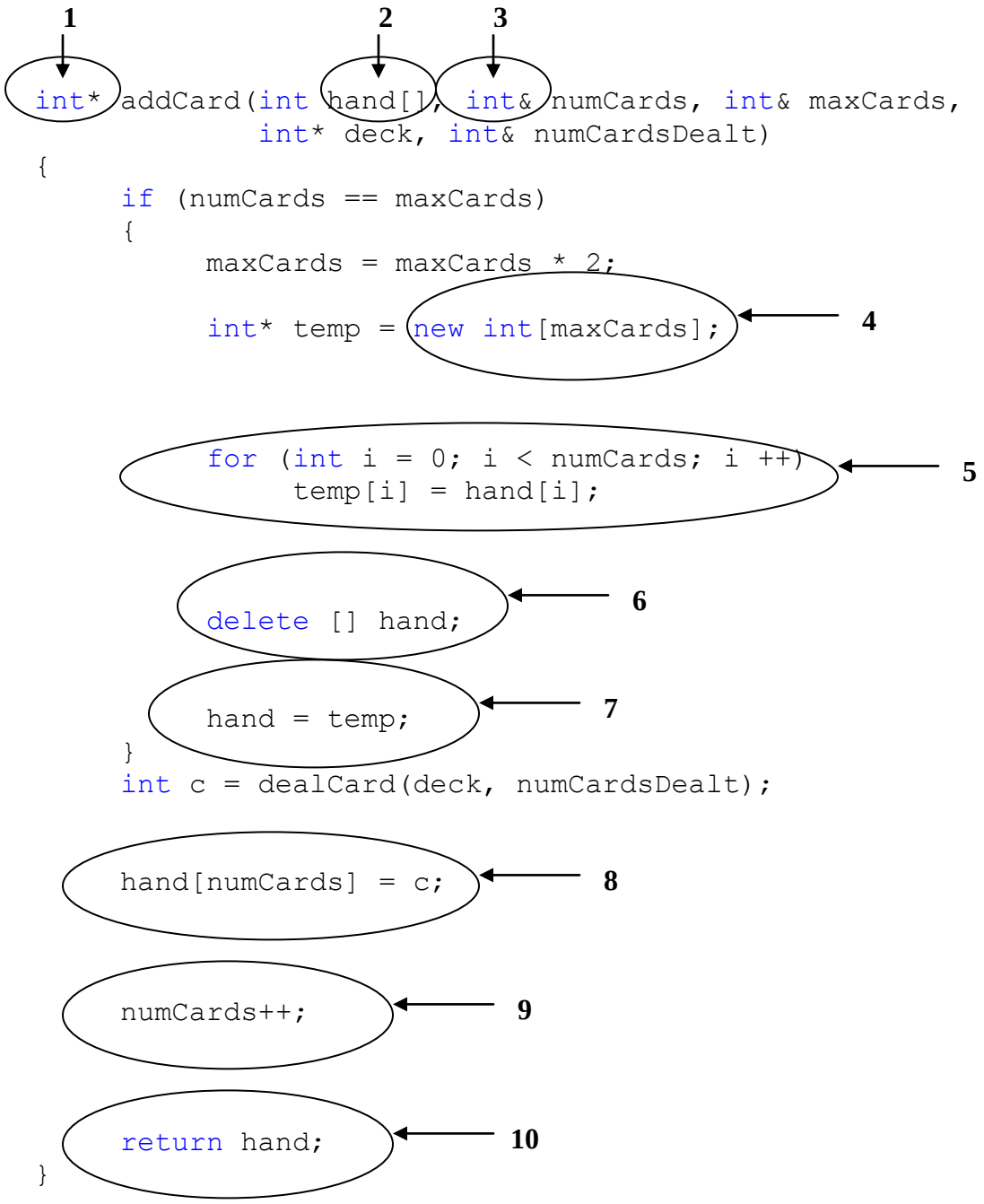
CS 233 G – Midterm 1
50 points

Part I: Match each of the vocabulary words at the right with the BEST definition on the left. (1 point each)

_____ 1.	A contiguous block of memory used to hold a set of data of the same type.	a. &
_____ 2.	A C-style string is implemented as this.	b. 2 D Array
_____ 3.	A named memory location used to store data during program execution.	c. address
_____ 4.	A variable that contains an address.	d. Array
_____ 5.	An example of a selection statement.	e. Array of chars
_____ 6.	Assume int hand[5]; hand is one of these.	f. Call
_____ 7.	Assume int hand[5]; hand[0] is one of these.	g. Definition
_____ 8.	Can be used to store a set of data that is "tabular" in nature.	h. Delete
_____ 9.	Control structure that allows your program to branch or make choices.	i. for
_____ 10.	Control structure that executes code 0 to many times.	j. Heap
_____ 11.	Describes exactly how a function will do its work.	k. if
_____ 12.	Got a memory leak? You must have forgotten to use this.	l. Int *
_____ 13.	Need more than one value returned from a function? Use this parameter passing mechanism.	m. New
		n. Parameter
_____ 14.	Provides the compiler with the signature of a function.	o. Pass by reference
_____ 15.	Statements in a program are executed in order.	
_____ 16.	The area of a program in which a variable is known and can be used.	p. Pass by value
_____ 17.	The area of memory in which dynamically allocated variables are stored.	q. Pointer
_____ 18.	The default parameter passing mechanism in C++.	r. Prototype
_____ 19.	The first array index value in C++.	s. Repetition
_____ 20.	The first line of this kind of repetition statement has 3 distinct parts.	t. Scope
_____ 21.	The term used for a piece of data that a function needs to do its work.	u. Selection
_____ 22.	This symbol specifies that a parameter is being passed by reference.	v. Sequence
_____ 23.	Use one of these to execute a function.	w. value
_____ 24.	Use this data type to represent a pointer to an integer.	x. Variable
_____ 25.	Use this operator to dynamically allocate memory.	y. Zero

Part II: Answer each of the following questions.

1. Briefly describe each of the 10 numbered sections of code below. (20 points)



2. A local zoo wants to keep track of how many pints of food each of its 3 monkeys eats each day during a typical week. Write a program that allows the user to enter the information for all 3 monkeys at the end of the week (only positive integer entries are allowed), stores this information in a reasonable data structure, calculates and displays:
    - The least amount of food eaten during the week by any one monkey
    - The total food eaten on each day for the group of monkeys
    - The average amount of food eaten per day by the group of monkeys

    Write this program using a class with a member variable (or variables) for storing the data and member functions for returning the calculated values. All I/O should be done in your program's main. (30 points)