Vibhore Sagar

Name: _____

Problems 1-10 refer to the following statements:

```
/*        0  1  2  3  4  5  array positions */
int x[] = {5, 6, 4, -8, 3, 7};
int *ptr = &x[0];
```

What is the value of the following expressions? For each problem, restart with the values as above.

	Work Space	**Your Answer**	**Computer**
1. *ptr		1. 5	1. 5
2. *ptr + 3		2. 8	2. 8
3. *(ptr+3)		3. -8	3. -8
4. *ptr + *(ptr + 5)		4. 12	4. 12
5. *(ptr + 2) - 1		5. 3	5. 3
6. x[3] - *ptr		6. -13	6. -13
7. *ptr + x[5] + *(ptr + 1) + x[2]		7. 22	7. 22
8. *x		8. 5	8. 5
9. *x + *ptr		9. 10	9. 10
10. x[2] - *ptr + 3		10. 2	10. 2

➔ more on next page

Problems 11-16 refer to the following declarations and function:

```
int partial_sum (int x[], int npts);   /* function prototype */
/* Array & variables as initialized in main, abridged */
 int main (void)

/*          0   1   2  3   4    5    6    7   array positions */
int a[ ] = {-6,  3,  4,  1,  8,  20,  16,  7};
int *ptr = &a[2];

/*-------------------------------------------------------------------------*/
   /* This function will add up a fragment of the array    */
   int partial_sum (int x[], int npts) {

      int k, sum = 0;

      /*  Compute partial sum.  */
      for (k = 0; k < npts; k++)
          sum += x[k];

      return sum;
   }
   /*----------------------------------------*/   /* workspace below
   */
```

	You	Computer
11. What is the value of the reference partial_sum(ptr, 2)	11. 5	11. 5
12. What is the value of the reference partial_sum(ptr+1, 3)	12. 29	12. 29
13. What is the value of the reference partial_sum(a, 8)	13. 53	13. 53
14. What is the value of the reference partial_sum(a, 4)	14. 2	14. 2
15. What is the value of the reference partial_sum(ptr, a[1])	15. 13	15. 13
16. What is the value of the reference partial_sum(&a[3], 2)	16. 9	16. 9

The file you need for lab6 to fill in the "computer" part is: lab6.c
First move to your class folder by typing: **cd csc60**
Type: **cp /gaia/home/faculty/bielr/files_csc60/lab6.c . (**Don't miss the "space dot" after the **c)**
Next the permissions on the file needs to be changed by typing: **chmod 644 lab6.c**

Compile, run it, fill in the rest of the worksheet.
No points off for wrong guesses. The point is to learn from both the correct answers and the wrong ones.
Turn in this worksheet for credit. 16 points.