

1. (+25) Declare an array of integers named **foo** that has 1000 elements, but do not initialize it:

```
+5 +5 +5 +5 +5 []
int foo[ 1000 ];
```

2. (+30) Show how you would initialize the above array with values entered from the file named "**data.txt**":

```
ifstream fin( "data.txt" );
if( fin.fail() ) return 1;

for( int i = 0; i < 1000; i++ )      +5 for() or while()
    fin >> foo[ i ];                  +5 INIT
                                         +5 TEST
                                         +5 MODIFY
                                         +10 loop body
```

3. (+25) A function named **arrayAvg** has two parameters: an integer array and an integer number of elements in the array. It returns a **double**, the average of all the array element values. Write a function prototype for **arrayAvg**:

```
+5 +5 +5 +5 +5 ( )
double arrayAvg( int a[], int n );
```

4. (+20) Show how you would call this function to find the average in the array **foo**:

```
+5 +5 +5 +5 ( )
arrayAvg( foo, 1000 )
```