CS 121 - Worksheet 12 pt2 - More Pointer Stuff

Syntax Problems:

1. Fill in the comments indicating whatever changes are occurring.

```
#include <iostream>
using namespace std;

int main()
{
  const int ARRAY_SIZE = 6;
  int* ptrA, *ptrB, *ptrC;
  int x = 20, y = 40;
  int z[ARRAY_SIZE] = {3, 6, 9, 12, 15, 18};

  ptrA = &x;                  //
  ptrC = &y;                  //
  ptrB = &z[1];               //

  x += Z[4];                  //
  *ptrC = y + *ptrA;          //
  *ptrB += *(ptrB - 1);       //

  ptrB--;                     //
  ptrC = ptrA;                //
  ptrA = ptrB + 3;            //
  ptrB = &y;                  //

  *ptrA = *ptrB / 5;          //
  *ptrB = *ptrB - 25;         //
  *ptrC /= 7;                 //

  cout << x << endl;          //
  cout << y << endl;          //

  for(int i = 0; i < ARRAY_SIZE; ++i)
  {
    cout << z[i] << endl;     //
  }

  return 0;
}
```

2. Write out how to safely create a dynamically allocated integer array given an integer pointer *cake_list* and a user inputted integer *num_cakes*. Assume *num_cakes* is initialized already and *cake_list* is not pointing to anything.

3. Fill in the following code using proper pointer manipulation (i.e. delete whenever you use new). **NOTE:** It is highly suggested to write pseudocode first before writing out the actual code.

```
// Resizes an array (arr) to new_size, keeping its elements intact
// NOTE: If new_size < current_size, truncate elements
// NOTE 2: Assume new_size >= 1
void resize_array(double* arr, int current_size, int new_size)
{









}
```