```cpp
1  /*
2  Daniel Avila March 18th 2020 Section 19
3  Lab 7: Practice with Raw Pointers
4  Description: In this lab, we use pointers variables that
5  Description: point to the set variable and access its storage.
6  */
7  #include <iostream>
8  using namespace std;
9
10 int main()
11 {
12     int length; //Holds length
13     int width; //holds width
14     int area; // holds area
15     int* lengthPtr = nullptr; //int pointer which will be set to point to length
16     int* widthPtr = nullptr; //int pointer which will be set to point to width
17
18     cout << "Please input the length of the rectangle" << endl;
19     cin >> length;
20     cout << "Please input the width of the rectangle" << endl;
21     cin >> width;
22
23     //Fill in code to make lengthPtr point to length (holds its address)
24     lengthPtr = &length;
25     //Fill in code to make widthPtr point to width (holds its address)
26     widthPtr = &width;
27
28     area = *lengthPtr * *widthPtr; //Fill in code to find the area by using only
         the pointer variables
29     cout << "The area is " << area << endl;
30
31     // Fill in the condition of length > width by using only the pointer variables
32     if (*lengthPtr > * widthPtr)
33         cout << "The length is greater than the width" << endl;
34     // Fill in the condition of width > length by using only the pointer variables
35     else if (*widthPtr  > *lengthPtr)
36         cout << "The width is greater than the length" << endl;
37     else
38         cout << "The width and length are the same" << endl;
39     return 0;
40 }
```

Given the following information, fill the blanks with either "an address" or "3.75".

float *pointer;
float pay = 3.75;
pointer = &pay;

1. cout << pointer; will print <u>an address.</u>
2. cout << *pointer; will print <u>3.75.</u>
3. cout << &pay; will print <u>an address.</u>
4. cout << pay; will print <u>3.75.</u>
5. Parameters that are passed by <u>reference</u> are similar to a pointer variable in that
   they can contain the address of another variable. They are used as parameters of a
   procedure (void function) whenever we want a procedure to change the value of the argument.

```
Please input the length of the rectangle
100
Please input the width of the rectangle
50
The area is 5000
The length is greater than the width
```

```
Please input the length of the rectangle
50
Please input the width of the rectangle
100
The area is 5000
The width is greater than the length
```

```
Please input the length of the rectangle
50
Please input the width of the rectangle
50
The area is 2500
The width and length are the same
```