

Evaluate the following code segments. Show the trace of the variables in the appropriate columns and show the output of each code segment in the rectangles provided.

1.

```
int i = 0;           i      sum
int sum = 0;

for (i = 3; i <= 5; i++)
{
    sum += i;
}

cout << i << endl;
cout << sum << endl;
```

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2.

```
int count = 0;       count  sum
int sum = 0;

while (sum < 50 && count < 5)
{
    sum += count;
    count += 2;

    if (sum == 6)
    {
        continue;
    }

    cout << sum << endl;
}
```

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3. Assume that the user inputs the values 7, 10, 15, and -99.

```
int sum = 0;           sum  num
bool finishedYet = false;
int num = 0;

do
{
    cin >> num;

    if (num == -99)
    {
        break;
    }

    sum += num;
} while (num != -99);

cout << sum << endl;
```

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4. On the back of this worksheet, rewrite the code segment in Exercise #3 to take advantage of the flag variable finishedYet and to avoid using a break statement.