1. Expressions

<table>
<thead>
<tr>
<th>Expression</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 + 2 * 5//3</td>
<td>16</td>
</tr>
<tr>
<td>2.5 * 4 * 3 // 12 + 1.5</td>
<td>3.5</td>
</tr>
<tr>
<td>85 % (6 + 4) % 10 - 17 % 3</td>
<td>3</td>
</tr>
<tr>
<td>2 + 3 &gt; 3 + 4 and 1 &lt; 2 * 3</td>
<td>False</td>
</tr>
<tr>
<td>482//10//5//2.0 &gt; 2 or False</td>
<td>True</td>
</tr>
</tbody>
</table>

2. Parameter Mystery

- A two and a queen beats a king
- A queen and a queen beats a b
- A two and a king beats a five
- A king and a two beats a queen
- A queen and a two beats a five

3. If/Else Simulation

<table>
<thead>
<tr>
<th>Method Call</th>
<th>Value Returned</th>
</tr>
</thead>
<tbody>
<tr>
<td>mystery(4, 15)</td>
<td>15 + 10</td>
</tr>
<tr>
<td>mystery(7, 17)</td>
<td>27 + 10</td>
</tr>
<tr>
<td>mystery(12, 5)</td>
<td>15 + 10</td>
</tr>
<tr>
<td>mystery(16, 8)</td>
<td>28 + 2</td>
</tr>
</tbody>
</table>
4. Programming (one solution shown)

```python
def num_unique(a, b, c):
    if (a == b and b == c):
        return 1
    if (a != b and b != c and c != a):
        return 3
    return 2
```

5. Programming (one solution shown)

```python
def two_rectangles(width, height):
    scale = int(input("Scale = "))
    for line in range(1, height + 1):
        for i in range(1, width + 1):
            print("*", end="")
        print()
    for line in range(1, height*scale + 1):
        for i in range(1, width + 1):
            print(" ", end="")
        for i in range(1, width*scale + 1):
            print("*", end="")
        print()
```

6. Programming (one solution shown)

```python
def print_range(low, high):
    if (high < low):
        print("[] = 0")
    else:
        sum = low
        print("[", str(low), end="")
        for i in range(low + 1, high + 1):
            print(" ", + str(i), end="")
            sum = sum + i
        print("] = " + str(sum))
```