

## CS 145 Images and Imagination

### *Loop Practice Solutions* *Spring 2014*

For each loop shown on the next page, give the number of the matching picture (#1 through 13). *Note, each number is used exactly once.* For all, assume the size and color of the window is set using *only* the following commands:

```
size(100,100);  
rectMode(CORNER);  
background(175);
```

```
_11_ 1. for (int i = 0; i < width; i = i+20) {
    rect(i,height/2, 10,10);
}
```

```
_9_ 2. for (int i = height; i > 0 ; i = i-20) {
    rect(width/2,i, 10,10);
}
```

```
_8_ 3. for (int i = 0; i < height/2; i = i+20) {
    rect(i,i, 10,10);
}
```

```
_10_ 4. for (int i = 0; i < 4; i =i+20) {
    rect(i, i, 10,10);
}
```

```
_7_ 5. for (int i = width; i > width ; i = i-20) {
    rect(i, 0, 10,10);
}
```

```
_5_ 6. for (int i = 0; i < width; i = i+20) {
    rect(0,0, i,i);
}
```

```
_4_ 7. for (int i = 0; i < height; i = i+10) {
    rect(i,i, 10,10);
}
```

```
_3_ 8. for (int i = 0; i < 4; i = i+1) {
    rect(20*i, 20*i, 10,10);
}
```

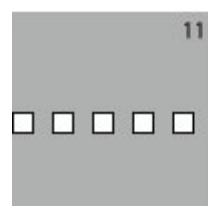
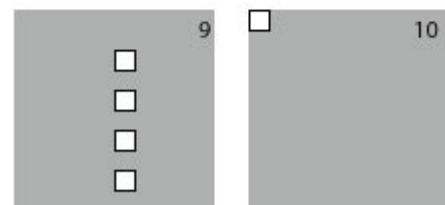
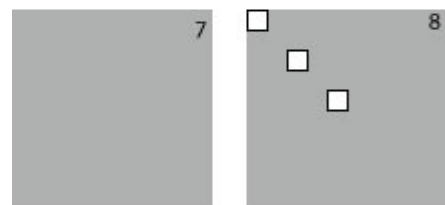
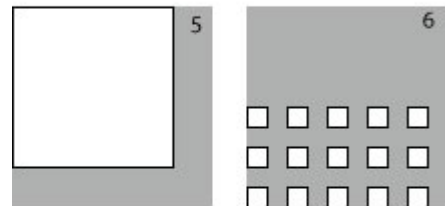
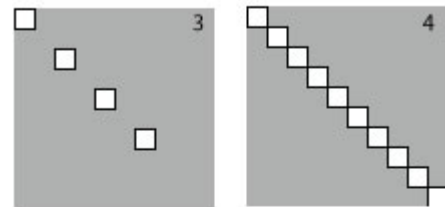
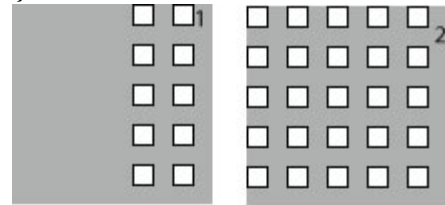
```
_13_ 9. for (int i = 0; i < height ; i = i-20) {
    rect(i, 0, 10,10);
}
```

```
_2_ 10. for (int i = 0; i < width; i = i+20) {
    for (int j=0; j < height; j = j+20) {
        rect(i,j, 10,10);
    }
}
```

```
_1_ 11. for (int i = 0; i < width; i = i+20) {
    for (int j=0; j < height; j = j+20) {
        if (i > height/2) {
            rect(i,j, 10,10);
        }
    }
}
```

```
_6_ 12. for (int i = 0; i < width; i=i+20) {
    for (int j=height/2; j < height; j=j+20) {
        rect(i,j, 10,10);
    }
}
```

```
_12_ 13. for (int i = 0; i < width/2; i=i+20) {
    for (int j=height/2; j < height; j=j+20) {
        rect(i,j, 10,10);
    }
}
```



12. No Image

13. Infinite Loop