Name : _____ Date : _____

LOOP QUIZ 1A

Show the output of each block of code below. (100 points)

1. What is the output?

```
for(int i=1; i<6; i=i+2)
{
   out.println(i);
}
```

2. What is the final value of `i` in the problem above when the for loop is complete?

3. What is the output?

```
for(int j=6; j>-2; j=j-2)
{
   out.println(j);
}
```

4. What is the final value of `j` in the problem above when the for loop is complete?

5. What is the output?

```
for(int k=1; k<12; k=k+3)
{
   out.println(k);
}
```

6. What is the final value of `k` in the problem above when the for loop is complete?

7. What is the output?

```
for(int m=11; m>0; m=m-4)
{
   out.println(m);
}
```

8. What is the final value of `m` in the problem above when the for loop is complete?

9. What is the output?

```
for(int p=60; p<=100; p+=10)
{
   out.println(p);
}
```

10. What is the final value of `p` in the problem above when the for loop is complete?

Draw the corresponding picture for the loops below. Partial credit given.

11.
```
for(int x = 0; x < 100; x+=40)
   rect(x,0,40,40);
```

12.
```
for(int val = 25; val <= 100; val += 25)
  rect(val,val,25,25);
```

13.
```
rectMode(CENTER);
for(int siz = 100; siz < 400; siz += 100)
  rect(200,200,siz,siz);
```

14.
```
for(int myst = 10; myst <= 50; myst += 10)
  rect(myst,0,myst,myst);
```

15.
```
translate(width/2,height/2);  //move to middle of screen
for(float theta = 0; theta < 2 * PI; theta += 2*PI/4);
{
      pushMatrix();
      rotate(theta);
      translate(40,0);
      ellipse(0,0,20,20);
      popMatrix();
}
```

Name : _____ Date : _____

LOOP QUIZ 1B

Show the output of each block of code below. (100 points)

1. What is the output?

```
for(int i=2; i<8; i=i+2)
{
   out.println(i);
}
```

2. What is the final value of `i` in the problem above when the for loop is complete?

3. What is the output?

```
for(int j=9; j>-2; j=j-3)
{
   out.println(j);
}
```

4. What is the final value of `j` in the problem above when the for loop is complete?

5. What is the output?

```
for(int k=1; k<19; k=k+4)
{
   out.println(k);
}
```

6. What is the final value of `k` in the problem above when the for loop is complete?

7. What is the output?

```
for(int m=9; m>0; m=m-2)
{
   out.println(m);
}
```

8. What is the final value of `m` in the problem above when the for loop is complete?

9. What is the output?

```
for(int p=20; p<=50; p+=10)
{
   out.println(p);
}
```

10. What is the final value of `p` in the problem above when the for loop is complete?

Draw the corresponding picture for the loops below. Partial credit given.

11.
```
for(int x = 0; x < 100; x+=40)
  rect(x,0,40,40);
```

12.
```
for(int val = 25; val <= 100; val += 25)
  rect(val,val,25,25);
```

13.
```
rectMode(CENTER);
for(int siz = 100; siz < 400; siz += 100)
  rect(200,200,siz,siz);
```

14.
```
for(int myst = 10; myst <= 50; myst += 10)
  rect(myst,0,myst,myst);
```

15.
```
translate(width/2,height/2);  //move to middle of screen
for(float theta = 0; theta < 2 * PI; theta += 2*PI/4);
{
      pushMatrix();
      rotate(theta);
      translate(40,0);
      ellipse(0,0,20,20);
      popMatrix();
}
```