

```

void drawHouse() {

    //TODO for students *****
    //fix the locations of the house by changing the values for the rect and
    //triangle - make it match your handout
    //When you are done, ask for the secret to have a visitor come to your
    //house
    //*****
    stroke(255, 255, 255);

    //house
    fill(0, 102, 204);
    rect(0, 0, 200, 250);

    //roof
    fill(0, 0, 0);
    triangle(200, 400, 300, 300, 400, 400);

    //grass
    fill(0, 255, 0);
    rect(0, 250, 400, 50);

    //door
    fill(153, 76, 0);
    rect(300, 100, 50, 100);

    //add code for windows here

}

```

```

void drawGrid() {
    //the horizontal lines
    stroke(0, 0, 255);
    line(0, 50, width, 50);
    line(0, 100, width, 100);
    line(0, 150, width, 150);
    line(0, 200, width, 200);
    line(0, 250, width, 250);
    line(0, 300, width, 300);
    line(0, 350, width, 350);
    //the vertical lines

```

```
stroke(255, 0, 255);
line(50, 0, 50, height);
line(100, 0, 100, height);
line(150, 0, 150, height);
line(200, 0, 200, height);
line(250, 0, 250, height);
line(300, 0, 300, height);
line(350, 0, 350, height);
}
```

```
void drawVisitor() {
noStroke();
fill(128, 128);
beginShape();
vertex(gx, 265);
vertex(gx+20, 260);
vertex(gx+25, 300);
vertex(gx+15, 290);
vertex(gx+5, 300);
vertex(gx-5, 290);
vertex(gx-15, 300);
vertex(gx-25, 290);
vertex(gx-20, 260);
endShape(CLOSE);
ellipse(gx, 250, 50, 50);
stroke(255);
fill(255);
pushMatrix();
translate(gx, 250);
scale(0.75);
translate(-gx, -250);
beginShape();
vertex(gx, 265);
vertex(gx+20, 260);
vertex(gx+25, 300);
vertex(gx+15, 290);
vertex(gx+5, 300);
vertex(gx-5, 290);
vertex(gx-15, 300);
vertex(gx-25, 290);
vertex(gx-20, 260);
endShape(CLOSE);
ellipse(gx, 250, 50, 50);
```

```
popMatrix();  
fill(0, 200);  
ellipse(gx-5, 245, 8, 12);  
ellipse(gx+5, 245, 8, 12);  
gx= gx+1;  
}
```

```
void setup() {  
  size(400, 400);  
  grid = true;  
  gx = 0;  
}
```

```
boolean grid;  
boolean anim;  
int gx;
```

```
void draw() {  
  background(255);  
  anim = false;  
  if (grid) {  
    drawGrid();  
  }  
  drawHouse();  
  if (anim) {  
    drawVisitor();  
  }  
}
```