# **Lösungen Funktionen**

## Übung 1:

a)

|  |
| --- |
| void setup() {  size(500, 500);  background(30);  kleinerRoterKreis(); }  void kleinerRoterKreis() {  fill(255, 0, 0);  ellipse(50, 50, 30, 30); } |

b)

|  |
| --- |
| void setup() {  size(500, 500);  background(30);  kleinerRoterKreis(50, 50); *// kleinerRoterKreis(50, 100);* }  void kleinerRoterKreis(float x, float y) {  fill(255, 0, 0);  ellipse(x, y, 30, 30); } |

## Übung 2:

a.

|  |
| --- |
| boolean istMausLinks() {  if(mouseX < width/2) {  return true;  } else {  return false;  }  *// oder kürzer:*  *// return (mouseX > width/2);* } |

b.

|  |
| --- |
| void setup() {  size(500, 500);  background(30); }  void draw() {  if(istMausLinks()) {  background(0);  } else {  background(255);  }  *// optionale Linie in der Mitte*  *// stroke(50);* *// strokeWeight(5);* *// line(width/2, 0, width/2, height);*  } |

## Übung 3: a.

|  |
| --- |
| void setup() {  size(500, 500); }  void draw() {  ellipse(random(100, 400), random(100, 400), 20, 20); } |

## 

## b.

|  |
| --- |
| void setup() {  size(500, 500); }  float t = 0;  void draw() {  background(30);  ellipse(width/2, height/2 + sin(t) \* 200, 50, 50);  t += 0.1; } |

## Übung 4:

|  |
| --- |
| void setup() {  size(500, 500);  house(100, 100, 150, 170); }  void house(float x, float y, float breite, float hoehe) {  rect(x, y, breite, hoehe);  triangle(x, y, x + breite/2, y - hoehe/2, x + breite, y); } |