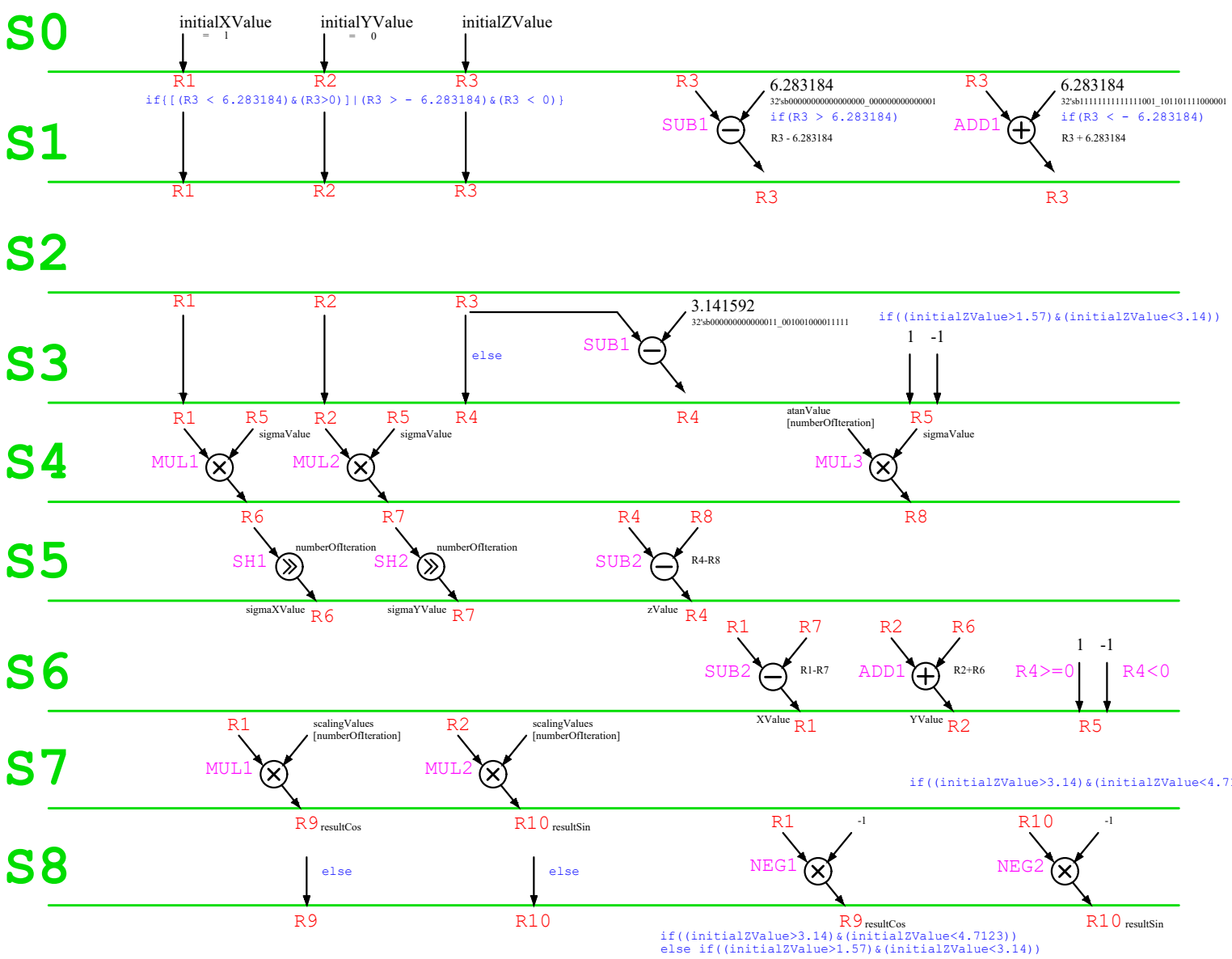


```
R1 <- initialXValue; (1)
R2 <- initialYValue; (0)
R3 <- initialZValue;
```

```
if(R3 > 6.283184)
R3 ← R3 - 6.283184; (Sub1)
if(R3 < - 6.283184)
R3 ← R3 + 6.283184; (Add1)
if{[(R3 < 6.283184)&(R3>0)]|(R3 > - 6.283184)&(R3 < 0)}
nextState <= S2;
```

```
if[(R3 > 0)&(R3 < 6.283184)]
nextState <= S3;
else
nextState <= S1;
```

```
if[(R3 > -6.283184)&(R3 < 6.283184)]
nextState <= S3;
else
```

```
if[(R3 > 0)&(R3 < 6.283184)]
nextState <= S3;
else
nextState <= S1;
```

```
if((R3>1.57)&(R3<3.14))
R4 <- R3 - 3.141592; (Sub1)
R5 <- -1;
if((R3>3.14)&(R3<4.71))
R4 <- R3 - 3.141592; (Sub1)
R5 <- -1;
else
R4 <- R3;
R5 <- 1;
```

```
R6 <- R1 x R5; (Mul1)
R7 <- R2 x R5; (Mul2)
R8 <- atanValues[numberOfIteration] x R5; (Mul3)
```

```
R6 <- R6 >> numberOfIteration; (Sh1)
R7 <- R7 >> numberOfIteration; (Sh2)
R4 <- R4 - R8; (Sub2)
```

```
if(R4>=0)
R1 <- R1 - R7; (Sub2)
R2 <- R2 + R6; (Add1)
R5 <- 1;
if(R4<0)
R1 <- R1 - R7; (Sub2)
R2 <- R2 + R6; (Add1)
R5 <- -1;
```

```
R9 <- R1 x scalingValues[numberOfIteration]; (Mul1)
R10 <- R2 x scalingValues[numberOfIterataion]; (Mul2)
```

```
if((R3>1.57)&(R3<4.7123))
R9 <- R9 x -1; (Neg1)
R10 <- R10 x -1; (Neg2)
if((R3>3.14)&(R3<4.71))
R9 <- R9 x (-1); (Neg1)
R10 <- R10;
else
R9 <- R9;
R10 <- R10;
```