

# THE LETTER FUNCTIONS - R O M A N

## THE\_LETTER\_R

```
function xy = THE_LETTER_R(height, width, ptsPerMeter, ptsPerRadian, xyLocation)
    xy_1 = StraightLine(0, 0, 0, height, ptsPerMeter);           % left
    xy_2 = StraightLine(0, height, (3/4)*width, height, ptsPerMeter); % top
    xy_3 = CurvedLine((3/4)*width, height, (3/4)*width, (1/2)*height, (1/4)*width, ptsPerRadian); % curve
    xy_4 = StraightLine((3/4)*width, (1/2)*height, 0, (1/2)*height, ptsPerMeter); % middle
    xy_5 = StraightLine(0, (1/2)*height, width, 0, ptsPerMeter); % leg

    xy_all = [xy_1; xy_2; xy_3; xy_4; xy_5];

    xy = xy_all + xyLocation;
end
```

## THE\_LETTER\_O

```
function xy = THE_LETTER_O(height, width, ptsPerMeter, ptsPerRadian, xyLocation)
    xy_1 = CurvedLine(width, (2/3)*height, 0, (2/3)*height, (1/3)*height, ptsPerRadian); % top
    xy_2 = StraightLine(0, (2/3)*height, 0, (1/3)*height, ptsPerMeter); % left
    xy_3 = CurvedLine(0, (1/3)*height, width, (1/3)*height, -(1/3)*height, ptsPerRadian); % bottom
    xy_4 = StraightLine(width, (1/3)*height, width, (2/3)*height, ptsPerMeter); % right

    xy_all = [xy_1; xy_2; xy_3; xy_4];

    xy = xy_all + xyLocation;
end
```

## THE\_LETTER\_M

```
function xy = THE_LETTER_M(height, width, ptsPerMeter, xyLocation)
    xy_1 = StraightLine(0, 0, 0, height, ptsPerMeter); % left
    xy_2 = StraightLine(0, height, width/2, height/2, ptsPerMeter); % middle-left
    xy_3 = StraightLine(width/2, height/2, width, height, ptsPerMeter); % middle-right
    xy_4 = StraightLine(width, height, width, 0, ptsPerMeter); % right

    xy_all = [xy_1; xy_2; xy_3; xy_4];

    xy = xy_all + xyLocation;
end
```

## THE LETTER FUNCTIONS - R O M A N

### THE\_LETTER\_A

```
function xy = THE_LETTER_A(height, width, ptsPerMeter, xyLocation)
    xy_1 = StraightLine(0, 0, width/2, height, ptsPerMeter);           % left
    xy_2 = StraightLine(width/2, height, width, 0, ptsPerMeter);       % right
    xy_3 = StraightLine(width, 0, (5/6)*width, height/3, ptsPerMeter); % right-bottom
    xy_4 = StraightLine((5/6)*width, height/3, (1/6)*width, height/3, ptsPerMeter); % horizontal

    xy_all = [xy_1; xy_2; xy_3; xy_4];

    xy = xy_all + xyLocation;
end
```

### THE\_LETTER\_N

```
function xy = THE_LETTER_N(height, width, ptsPerMeter, xyLocation)
    xy_1 = StraightLine(0, 0, 0, height, ptsPerMeter);               % left5
    xy_2 = StraightLine(0, height, width, 0, ptsPerMeter);           % middle
    xy_3 = StraightLine(width, 0, width, height, ptsPerMeter);       % right

    xy_all = [xy_1; xy_2; xy_3];

    xy = xy_all + xyLocation;
end
```