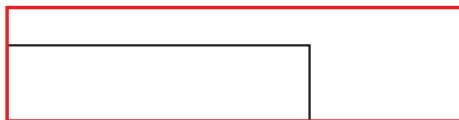


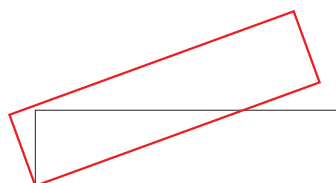
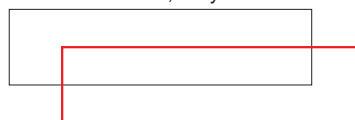
# Geometric Transformations

This example demonstrates the geometric transformation operations available in tc-lib-pdf: **scaling**, **translation**, **rotation**, **skewing**, **mirroring**, and combined **affine transformations**. Each operation is shown with a reference rectangle (black) and the transformed result (red).

Scaling: 150% around (50, 80)

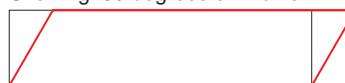


Translation: +7 x, +5 y



Rotation: 20 degrees around (70, 110)

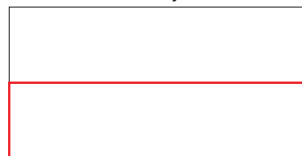
Skewing: 30 degrees on x-axis



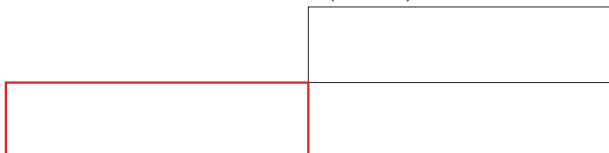
Horizontal mirror at x = 70



Vertical mirror at y = 140



Point reflection at (70, 170)



Line reflection through (120, 170), angle -20 degrees

