Drawing a Plane

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1 Introduction

To transform a unit square and three unit triangles into an plane through three types of transformations, including translation, scaling, and rotation.

2 Implementation

- square
$$T(0,3) \cdot S(5,2)$$

- triangle1
$$T(1,5)$$

- triangle2
$$T(1,3) \cdot R(-\frac{\pi}{2}) \cdot S(2,2)$$

- triangle3
$$T(7,4) \cdot R(\frac{3}{4}\pi) \cdot S(2\sqrt{2}, 2\sqrt{2})$$