Figures for Lemma on page 6 of Lecture Note II

Action of reflection about M₁, followed by reflection about M₂.

\( M₁, M₂ \): mirror lines
\( \theta \): angle between them

**Figure 1**

(when \( \gamma < \theta \))

Start with vector \( u \)
reflect about \( M₁ \) to obtain \( u' \)
then reflect \( u' \) about \( M₂ \) to get \( u'' \)

Angle between \( u'' \) and \( u' \) = \( 2\gamma + 2\beta = 2\theta \)

**Figure 2**

(when \( \gamma > \theta \))

\( \beta \)
\( \gamma \)
\( \beta \)

Angle between \( u'' \) & \( u' \)
\( = \gamma + \gamma - 2\beta \)
\( = 2(\gamma - \beta) = 2\theta \)