Appendix C

Miscellany

The Greek Alphabet

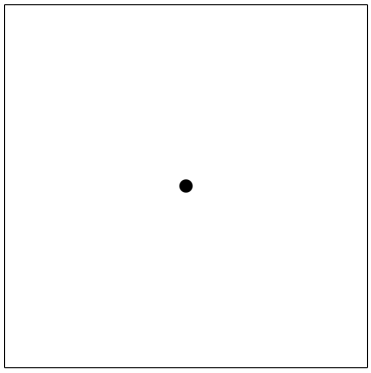
Letters	**Names**	**Letters**	**Names**	**Letters**	**Names**
$A,\ \alpha$	alpha	$I,\ \iota$	iota	$P,\ \rho\,(\varrho)$	rho
$B,\ \beta$	beta	$K,\ \kappa$	kappa	$\Sigma,\ \sigma\,(\varsigma)$	sigma
$\Gamma,\ \gamma$	gamma	$\Lambda,\ \lambda$	lambda	$T,\ \tau$	tau
$\Delta,\ \delta$	delta	$M,\ \mu$	mu	$\Upsilon,\ \upsilon$	upsilon
$E,\ \epsilon\,(\varepsilon)$	epsilon	$N,\ \nu$	nu	$\Phi,\ \phi\,(\varphi)$	phi
$Z,\ \zeta$	zeta	$\Xi,\ \xi$	xi	$X,\ \chi$	chi
$H,\ \eta$	eta	$O,\ o$	omicron	$\Psi,\ \psi$	psi
$\Theta,\ \theta\,(\vartheta)$	theta	$\Pi,\ \pi\,(\varpi)$	pi	$\Omega,\ \omega$	omega

The Gothic (Fraktur) Alphabet

𝔄, 𝔞	ℌ, 𝔥	𝔒, 𝔬	𝔘, 𝔲
𝔅, 𝔟	ℑ, 𝔦	𝔓, 𝔭	𝔙, 𝔳
ℭ, 𝔠	𝔍, 𝔧	𝔔, 𝔮	𝔚, 𝔴
𝔇, 𝔡	𝔎, 𝔨	ℜ, 𝔯	𝔛, 𝔵
𝔈, 𝔢	𝔏, 𝔩	𝔖, 𝔰	𝔜, 𝔶
𝔉, 𝔣	𝔐, 𝔪	𝔗, 𝔱	𝔝, 𝔷
𝔊, 𝔤	𝔑, 𝔫		

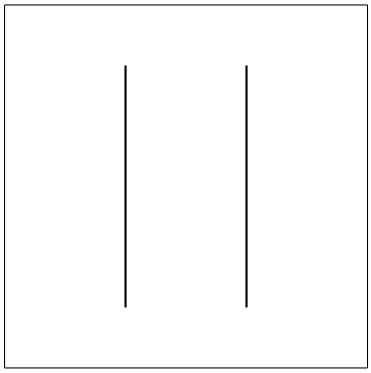
Affine Transformations on the Euclidean Plane

1. The identity transformation



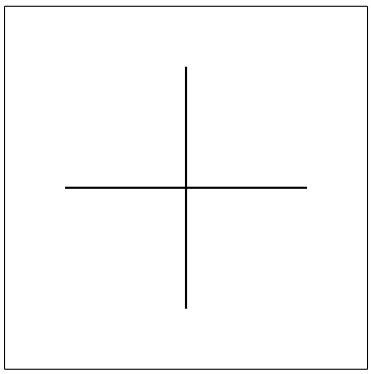
The identity transformation ι

2. Translation



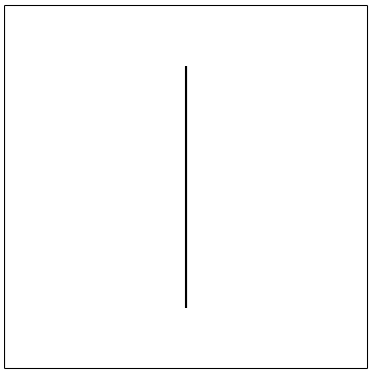
The translation $\tau_{P,Q}$

3. Halfturn (about a point)



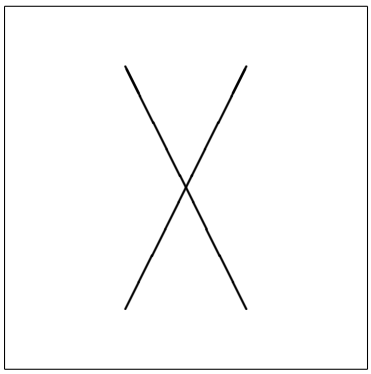
The halfturn σ_P

4. Reflection (in a line)



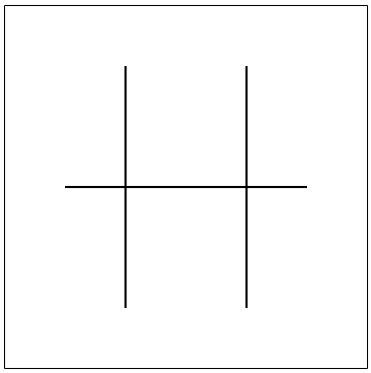
The reflection $\sigma_{\mathcal{L}}$

5. Rotation (about a point)



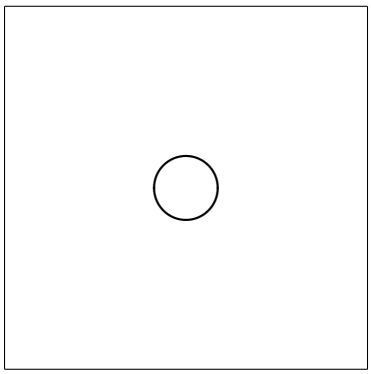
The rotation $\rho_{P,r}$

6. Glide reflection (along an axis)



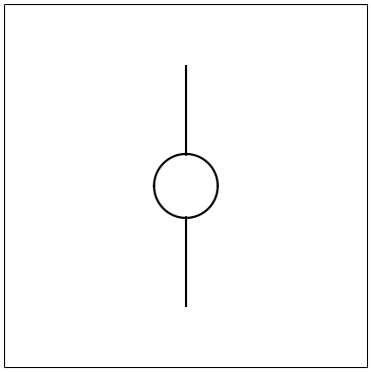
The glide reflection $\gamma = \sigma_{\mathcal{B}}\sigma_A = \sigma_B\sigma_{\mathcal{A}}$

7. Stretch (about a point)



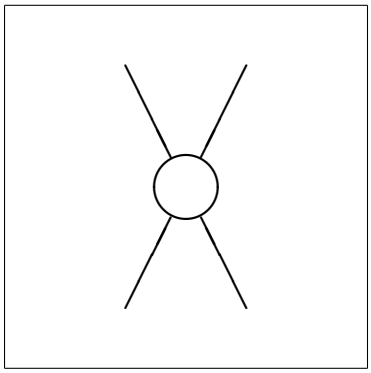
The stretch $\delta_{P,r}$

8. Stretch reflection



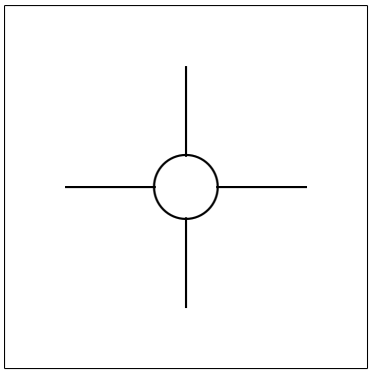
The stretch reflection $\sigma_{\mathcal{L}}\delta_{P,r}$

9. Stretch rotation



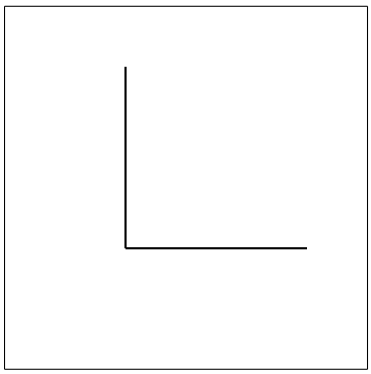
The stretch rotation $\rho_{P,s}\delta_{P,r}$

10. Dilation



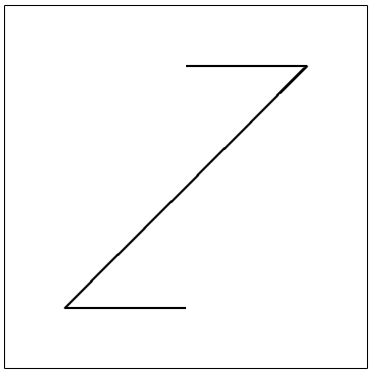
The (nonisometric) dilation $\sigma_P\delta_{P,r}$ $(r \neq 1)$

11. Strain (about a line)



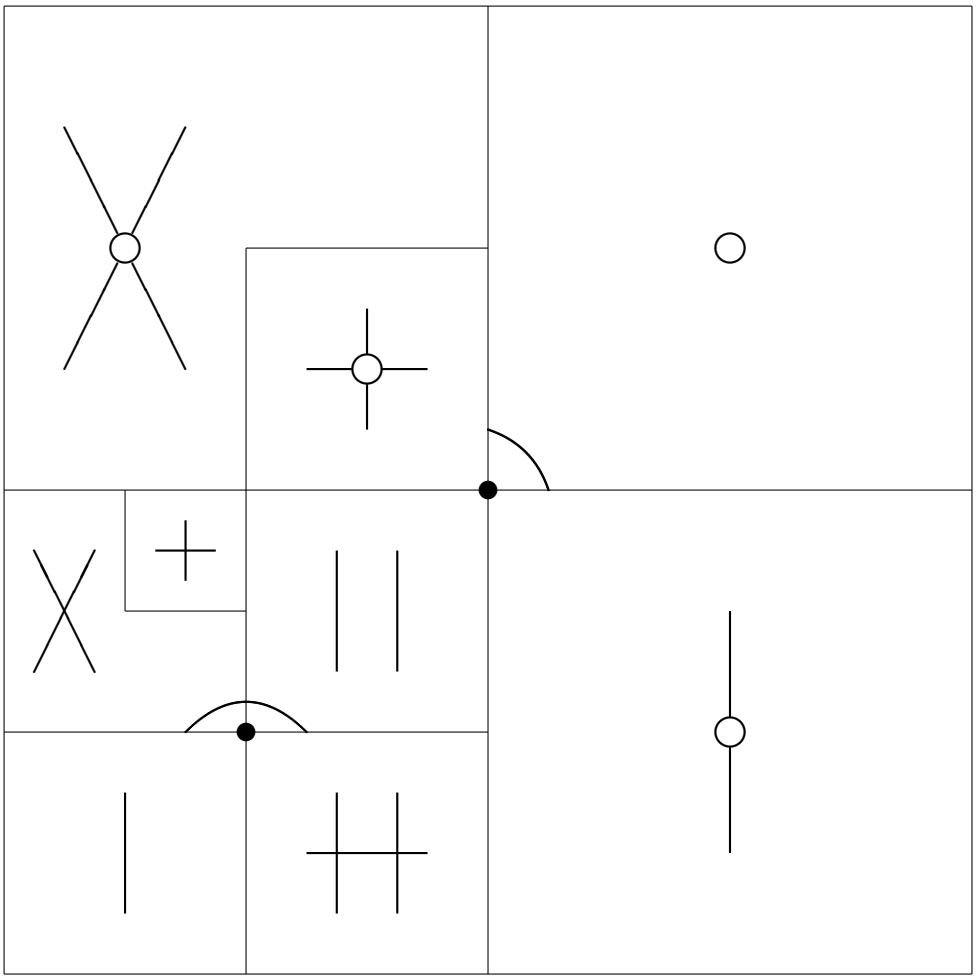
The strain $\varepsilon_{\mathcal{L},r}$

12. Shear (along a line)



The shear $\zeta_{\mathcal{L},r}$

Similarities on the Euclidean Plane



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