Transformational Plane geometry – Errata List
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p. 53, Proof. Let $\rho_{C,\Theta}$ be a rotation. Let P and Q be distinct points; ...

p. 59, #13. Let $P = \left[\begin{smallmatrix} a \\ b \end{smallmatrix}\right]$ and $Q = \left[\begin{smallmatrix} c \\ d \end{smallmatrix}\right]$ be points.

p. 68, #8. ...points on l and l', respectively, that are ... Let S and T be the feet of the perpendiculars from P and R to m, respectively.

p. 75, Definition 137. Given intersecting lines l and m, let...

p. 75, Section 5.2, para 2. In fact, *twice the measures of any two angles from* l *to* m *are congruent* (mod 360).

p. 75, Exploratory Activity 4, item 1. Construct four points, no three of which are collinear, label ...

p. 76, Theorem 138. Given intersecting lines ...

p. 77, Theorem 139. ...is the composition of two reflections in intersecting lines.

p. 81, Exploratory Activity 5, item 1. Construct four points, no three of which are collinear, label ...

p. 91, Proof. ... So assume $A \neq B$. Since $\Theta + \Phi \in 0^\circ$, either both Θ and Φ are multiples of 360 or neither Θ nor Φ is a multiple of 360. If $\Theta, \Phi \in 0^\circ$, then $\rho_{A,\Theta} = \rho_{B,\Phi} = \iota$ so that $\rho_{B,\Phi} \circ \rho_{A,\Theta} = \iota = \tau_{\mathbf{0}}$ (the trivial translation). If $\Theta, \Phi \notin 0^\circ$, let $\Theta' = \Theta^\circ \cap (0, 360)$, let $\Phi' = \Phi^\circ \cap (0, 360)$, and let $m = \overleftrightarrow{AB}$. By Corollary 142, there exist unique lines l and n passing through A and B, respectively, such that $\rho_{B,\Phi} = \sigma_n \circ \sigma_m$ and $\rho_{A,\Theta} = \sigma_m \circ \sigma_l$. ...

p. 94, #8. ... let $\tau_{\mathbf{v}} = \rho_{B,120} \circ \rho_{A,240}$, and let $m = \overleftrightarrow{AB}$. Use a MIRA ...

p. 96, line 1. Then $\sigma_m \circ \sigma_l = \rho_{C,\Theta}$ is a rotation ...

p. 96, line 2. $\alpha = \sigma_n \circ \rho_{C,\Theta}$ so that $\sigma_n = \alpha \circ \rho_{C,-\Theta}$.

p. 107, Proof, line 2. ...let α be an isometry fixing P and Q. Then α fixes m pointwise. Let R be ...

p. 107, Proof, line 6. Delete the redundant phrase "P, Q, and R are non-collinear and"

p. 136, Proof (c), line 3. Let $\rho_\Phi \in E$ be ...

p. 136, Proof (c), line 8. $\rho_\Phi = \rho_{k\Theta} = \rho_\Theta^k$.

p. 136, Proof (d), line 1. ...all reflections in G and let $\sigma \in F$. The elements ...

p. 137, Proof of closure, line 3. $\alpha\left(\beta\left(F\right)\right) = \alpha\left(F\right) = F$, we have $\alpha \circ \beta \in \mathrm{Sym}\left(F\right)$.

p. 142, Example 228. Case 2: c cuts m.

p. 146, Proof, line 4. center by Theorem 213, so this is a contradiction.

p. 160, line -1. Q_1 is not an n-center closest...

p. 161, para 5, line 3. The points in a primitive translation lattice are vertices of parallelograms with no interior lattice points. The letter c stands for *centered lattice,* in which some non-primitive cell and its centroid form the basic building block of the tessellation.

p. 171, lines 1 and 2. Delete the redundant sentences "Note that if $D = \xi_{C,r}\left(C\right)$, then $CD = rCC = 0$ and $D = C$. Thus a stretch fixes its center."

p. 172, #7. Delete the word "distinct".

p. 187, para 3, line 1. Delete "$\beta =$"

p. 190, #6. ... If α is a similarity, c is a line, and $\mathbf{v}$ is...

p. 203 line 2. D_5 D_9 D_5

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