

List of errors

“Lessons in Geometry. I. Plane Geometry” by Jacques Hadamard.

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Page	Text reading...	should read...
33, ex. 17	the lines starting from A are, in decreasing length, as follows: larger side, median (see Exercise 7 in Chapter II), angle bisector, smaller side, altitude.	the lines starting from A are encountered in the following order: larger side, median (see exercise 7 in Chapter II), angle bisector, altitude, smaller side.
57, ex. 39	A triangle with two equal median is isosceles.	A triangle with two equal medians is isosceles.
57, ex. 41	One of these diagonals is half the difference, and the other half the sum, of the sides of the parallelogram. [Error in original text.]	One of these diagonals is equal to the difference, and the other to the sum, of the sides of the parallelogram.
64, ex. 49	show that angle EOB is triple DOA	show that angle EOA is triple DOB
65, par. 62	A line segments whose endpoints	A line segment whose endpoints
74, ex. 55	[last two lines] When O is between O' and A, if the difference $OO' - (R-R')$ is less than $OO' - (O'B - OB)$ .	[last two lines] When O is between O' and A, if the difference $OO' - (R' - R)$ is less than $OO' - (O'B - OB)$ .
97, ex. 88b	...according as this segment between the two points...	...according as the segment between the two points...
133, par. 128, corollary	COROLLARY. The locus of points C, such that the difference of the distances from C to two fixed points A and B is constant, is a line perpendicular to AB.	COROLLARY. The locus of points C, such that the difference of the squares of the distances from C to two fixed points A and B is constant, is a line perpendicular to AB.
163, 18 <sup>th</sup> line of text	Let $BD = a$ :	Let $BC = a$ :
188, ex. 184	Verify that the two expression for AC...	Verify that the two expressions for AC...
188, ex. 189	the error is less than one ten-millionth of the radius.	the error is less than one ten-thousandth of the radius.
213, par. 204	The harmonic conjugate of the given point with respect to the segment MN is a line (Fig. 181).	The harmonic conjugate P of a given point $a$ with respect to segment MN is a line (Fig. 181).
217, par. 211 remark	The triangle aHK is formed by three diagonals of the complete quadrilateral HMKN. [Error in original text.]	Triangle aPP' is formed by three diagonals of the complete quadrilateral HMKN. [Error in original text.]
219, ex. 238	From the preceding exercise (part 2 <sup>o</sup> )...	From the preceding exercise (part 3 <sup>o</sup> )...
228, ex. 245	The inverses of circles with a common radical axis are also circles with a common radical axis.	The inverses of circles with a common radical axis are also circles with the same radical axis.
228, ex. 248	Two given circles can always be transformed, by the same inversion, either into two parallel lines or into two concentric circles.	Two given circles can always be transformed, by the same inversion, either into two lines or into two concentric circles.

229, ex. 256	When a variable circle intersects two fixed circles at a constant angle, it also cuts any fixed circle having the same radical axis as the first two at a constant angle.	When a variable circle intersects two fixed circles at constant angles, it also cuts any fixed circle having a common radical axis with the first two at a constant angle.
270, ex. 342	If two triangles are symmetric with respect to the center of their common inscribed circle, the areas of the eight triangles formed by their sides have a product equal to the sixth power of the radius of this circle.	If two triangles are symmetric with respect to the center of their common inscribed circle, the areas of the eight triangles formed by their sides have a product equal to the sixteenth power of the radius of this circle.
313, ex. 369	Through an interior point O of the triangle we draw segments OD', OE', OF' parallel to these, with D', E', F' on the corresponding sides.	Through an interior point O of the triangle we draw segments OD', OE', OF' parallel to these, with D' on BC, E' on AC, F' on AB.
314, ex 373	(Prove, using exercise 70, that the points symmetric to P relative to the three sides, are on a line passing through P.)	(Prove, using exercise 70, that the points symmetric to P relative to the three sides are on a line passing through H.)
315, ex 378, 5°	This circle is orthogonal to the escribed circles. Its center is the same as the center of the circumscribed circle of A'B'C'...	This circle is orthogonal to the escribed circles. Its center is the same as the center of the inscribed circle of A'B'C'...
315, ex. 380	...then triangle O <sub>1</sub> OO' must be similar to A <sub>1</sub> A''A.)	...then triangle O <sub>1</sub> OO' must be similar to A'A''A.)
317, ex. 391	...circle with the parallel to AB passing through M.	...circle with the parallel to AB passing through P.
317, ex. 393	Show that the second common tangent A'B' to these two circles is tangent to a fixed circle, and find the locus of the midpoint of A'B'.	Show that the circle whose diameter is the second common tangent A'B' to these two circles is tangent to a fixed circle, and find the locus of the midpoint of A'B'.
318, ex. 398	Show that these two circles are equal, and that their common radius is one fourth the geometric mean of the radii of C, c, C'.	Show that these two circles are equal, and that their common radius is the fourth proportional to the radii of C, c, C'.