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Mittenpunkt

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Abstract. By using the computer program "Machine for Questions and Answers", we find properties of the Mittenpunkt.

Given a point, the Machine for Questions and Answers produces theorems related to properties of the point. The Machine for Questions and Answers produces theorems related to properties of the Mittenpunkt:

Mittenpunkt = Symmedian Point of the Excentral Triangle.

Mittenpunkt = Gergonne Point of the Pedal Triangle of the Circumcenter.

Mittenpunkt = Symmedian Point of the Antipedal Triangle of the Incenter.

Mittenpunkt = Center of the Cosine Circle of the Excentral Triangle.

Mittenpunkt = Center of the Cosine Circle of the Antipedal Triangle of the Incenter.

Mittenpunkt = Midpoint between the Gergonne Point of the Anticomplementary Triangle and the Gergonne Point.

Mittenpunkt = Reflection of the Gergonne Point in the Complement of the Mittenpunkt.

Mittenpunkt = Product of the Incenter and the Nagel Point.

Mittenpunkt = Product of the Centroid and the Mittenpunkt.

Mittenpunkt = Product of the Schiffler Point and the Spieker Center.

Mittenpunkt = Product of the Internal Center of Similitude of the Incircle and the Circumcircle and the Isotomic Conjugate of the Incenter.

Mittenpunkt = Product of the Centroid of the Extouch Triangle and the Isotomic Conjugate of the Spieker Center.

Mittenpunkt = Internal Center of Similitude of the Bevan Circle and the Spieker Circle.

Mittenpunkt = Internal Center of Similitude of the Bevan Circle and the Incircle of the

Medial Triangle.

Mittenpunkt = Radical Center of the Triad of the Circumcircles of the Triangulation Triangles of the Mittenpunkt.

Mittenpunkt = Perspector of Triangle ABC and the Medial Triangle of the Extouch Triangle.

Mittenpunkt = Perspector of the Medial Triangle and the Excentral Triangle.

Mittenpunkt = Perspector of the Cevian Triangle of the Mittenpunkt and the Anticevian Triangle of the Mittenpunkt.

Mittenpunkt = Perspector of the Cevian Triangle of the Schiffler Point and the Anticevian Triangle of the Internal Center of Similitude of the Incircle and the Circumcircle.

Mittenpunkt = Perspector of the Medial Triangle and the Antipedal Triangle of the Incenter.

Mittenpunkt = Perspector of the Cevian Triangle of the Mittenpunkt and the Circumcevian Triangle of the Mittenpunkt.

Mittenpunkt = Perspector of the Excentral Triangle and the Pedal Triangle of the Circumcenter.

Mittenpunkt = Perspector of the Anticevian Triangle of the Mittenpunkt and the Circumcevian Triangle of the Mittenpunkt.

Mittenpunkt = Perspector of the Pedal Triangle of the Circumcenter and the Antipedal Triangle of the Incenter.

Mittenpunkt = Homothetic Center of Triangle ABC and the Triangle of the Mittenpunkts of the Corner Triangles of the Centroid.

Mittenpunkt = Perspector of Triangle ABC and the Triangle of the Centroids of the Corner Triangles of the Nagel Point.

Mittenpunkt = Homothetic Center of Triangle ABC and the Triangle of the Gergonne Points of the Anticevian Corner Triangles of the Centroid.

Mittenpunkt = Homothetic Center of Triangle ABC and the Triangle of the reflections of the Gergonne Point in the vertices of the Medial Triangle.

Mittenpunkt = Perspector of Triangle ABC and the Triangle of the reflections of the Mittenpunkt in the vertices of the Cevian Triangle of the Mittenpunkt.

Mittenpunkt = Perspector of Triangle ABC and the Triangle of the reflections of the Mittenpunkt in the vertices of the Anticevian Triangle of the Mittenpunkt.

Mittenpunkt = Perspector of Triangle ABC and the Triangle of the reflections of the vertices

of the Cevian Triangle of the Mittenpunkt in the Mittenpunkt.

Mittenpunkt = Perspector of Triangle ABC and the Triangle of the reflections of the vertices of the Anticevian Triangle of the Mittenpunkt in the Mittenpunkt.

Mittenpunkt = Perspector of Triangle ABC and the Outer Apollonius Triangle of the Lucas Circles of the Cevian Triangle of the Mittenpunkt.

Mittenpunkt = Perspector of Triangle ABC and the Outer Apollonius Triangle of the Lucas Circles of the Anticevian Triangle of the Mittenpunkt.

Mittenpunkt = Perspector of Triangle ABC and the Outer Apollonius Triangle of the Lucas Circles of the Circumcevian Triangle of the Mittenpunkt.

Mittenpunkt = Complement of the Gergonne Point.

Mittenpunkt = Complement of the Isogonal Conjugate of the Internal Center of Similitude of the Incircle and the Circumcircle.

Mittenpunkt = Complement of the Isotomic Conjugate of the Nagel Point.

Mittenpunkt = Complement of the Cyclocevian Conjugate of the Gergonne Point.

Mittenpunkt = Isogonal Conjugate of the Square of the Yff Center of Conguence.

Mittenpunkt = Complement of the Symmedian Point of the Intouch Triangle.

Mittenpunkt = Anticomplement of the Mittenpunkt of the Medial Triangle.

Mittenpunkt = Complement of the Isogonal Conjugate of the Exeter Point of the Intouch Triangle.

The Mittenpunkt lies on the Brocard Circle of the Excentral Triangle.

The Mittenpunkt lies on the Brocard Circle of the Antipedal Triangle of the Incenter.

The Mittenpunkt lies on the Line through the Incenter and the Symmedian Point.

The Mittenpunkt lies on the Line through the Centroid and the Gergonne Point.

The Mittenpunkt lies on the Line through the Orthocenter and the Spieker Center.

The Mittenpunkt lies on the Line through the Clawson Point and the Orthocenter.

The Mittenpunkt lies on the Line through the Clawson Point and the Spieker Center.

The Mittenpunkt lies on the Line through the Grinberg Point and the Incenter.

The Mittenpunkt lies on the Line through the Grinberg Point and the Symmedian Point.

Invitation

The reader is invited to submit a note/paper containing

- synthetic proofs of theorems from this paper,
- or, applications of theorems from this paper,
- or, additional references related to this paper.

Definitions and Conventions

We use the definitions and conventions in accordance with [1 - 6] and papers published in this journal.

The Level

The Machine for Questions and Answers is used to produce results in this paper. Currently the Machine has 6 levels of depths - 0,1,2,3,4,5. We use for this paper the level 0, that is, the Machine produces only elementary results. If we need deeper investigation, we have to use a level bigger than 0. Since the Machine for Questions and Answers produces too many results, it is suitable we to use bigger levels upon request, that is, for specific questions.

References

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