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Triangles of Reflections. Part 3.

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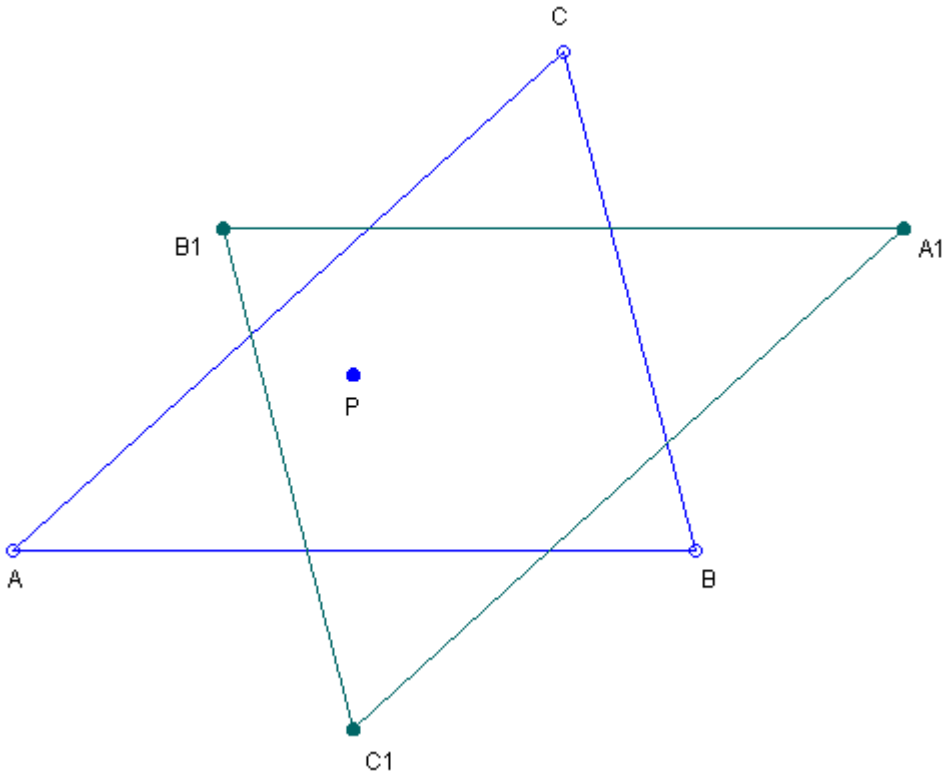
Abstract. By using the computer program "Machine for Questions and Answers", we study perspectors of basic triangles and triangles of reflections of a triangle center in the sides of Triangle ABC. We study perspectors of the Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and other triangles.

Given a triangle ABC and a Triangle Center, labeled by P. Construct the reflection A_1 of P in the sideline BC. Construct the reflection B_1 of P in the sideline CA. Construct the reflection C_1 of P in the sideline AB. We call triangle $A_1B_1C_1$ the *Triangle of the reflections of the Triangle Center in the sides of Triangle ABC.*

See the Figure:



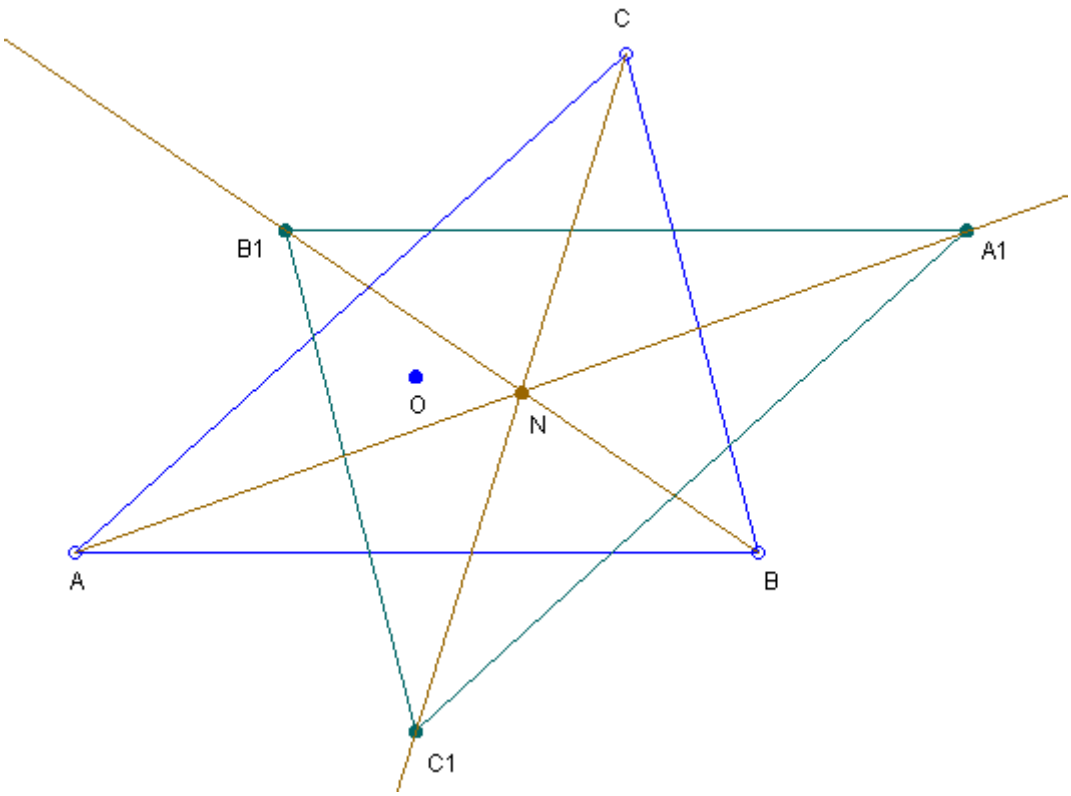
P - Triangle Center;
A_1 - reflection of P in the sideline BC;
B_1 - reflection of P in the sideline CA;
C_1 - reflection of P in the sideline AB;

$A_1B_1C_1$ - Triangle of the reflections of the Triangle Center in the sides of Triangle ABC.
In this Figure:
P - Circumcenter;
A_1 - reflection of P in the sideline BC;
B_1 - reflection of P in the sideline CA;
C_1 - reflection of P in the sideline AB;
$A_1B_1C_1$ - Triangle of the reflections of the Circumcenter in the sides of Triangle ABC.

We illustrate one of theorems given below:

Triangle ABC and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are homothetic with homothetic center the Nine-Point Center.

See the Figure:



O - Circumcenter;
A_1 - reflection of P in the sideline BC;
B_1 - reflection of P in the sideline CA;
C_1 - reflection of P in the sideline AB;
$A_1B_1C_1$ - Triangle of the reflections of the Circumcenter in the sides of Triangle ABC;
N - Nine-Point Center = Homothetic center of Triangle ABC and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC.

Examples

The Machine for Questions and Answers produces examples of perspectives between triangles and Triangles of reflections. A few examples are given below.

Triangle ABC and the Triangle of the reflections of the Incenter in the sides of Triangle ABC are perspective.

Triangle ABC and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are homothetic.

Triangle ABC and the Triangle of the reflections of the Orthocenter in the sides of Triangle ABC are perspective.

Triangle ABC and the Triangle of the reflections of the Outer Fermat Point in the sides of Triangle ABC are perspective.

Triangle ABC and the Triangle of the reflections of the Inner Fermat Point in the sides of Triangle ABC are perspective.

Triangle ABC and the Triangle of the reflections of the First Isodynamic Point in the sides of Triangle ABC are perspective.

Triangle ABC and the Triangle of the reflections of the Second Isodynamic Point in the sides of Triangle ABC are perspective.

Triangle ABC and the Triangle of the reflections of the Evans Perspector in the sides of Triangle ABC are perspective.

The Medial Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are homothetic.

The Medial Triangle and the Triangle of the reflections of the Schoute Center in the sides of Triangle ABC are perspective.

For any Triangle Center, the Orthic Triangle and the Triangle of the reflections of the Triangle Center in the sides of Triangle ABC are perspective.

The Symmedial Triangle and the Triangle of the reflections of the First Brocard Point in the sides of Triangle ABC are perspective.

The Symmedial Triangle and the Triangle of the reflections of the Second Brocard Point in the sides of Triangle ABC are perspective.

The Intouch Triangle and the Triangle of the reflections of the Incenter in the sides of Triangle ABC are homothetic.

The Extouch Triangle and the Triangle of the reflections of the Bevan Point in the sides of Triangle ABC are homothetic.

The Excentral Triangle and the Triangle of the reflections of the Incenter in the sides of Triangle ABC are homothetic.

The Excentral Triangle and the Triangle of the reflections of the Bevan Point in the sides of

Triangle ABC are perspective.

The Anticomplementary Triangle and the Triangle of the reflections of the Centroid in the sides of Triangle ABC are perspective.

The Anticomplementary Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are homothetic.

The Anticomplementary Triangle and the Triangle of the reflections of the Orthocenter in the sides of Triangle ABC are perspective.

The Anticomplementary Triangle and the Triangle of the reflections of the Nine-Point Center in the sides of Triangle ABC are perspective.

The Anticomplementary Triangle and the Triangle of the reflections of the de Longchamps Point in the sides of Triangle ABC are perspective.

The Anticomplementary Triangle and the Triangle of the reflections of the Schiffler Point in the sides of Triangle ABC are perspective.

The Anticomplementary Triangle and the Triangle of the reflections of the Exeter Point in the sides of Triangle ABC are perspective.

The Anticomplementary Triangle and the Triangle of the reflections of the Far-Out Point in the sides of Triangle ABC are perspective.

The Anticomplementary Triangle and the Triangle of the reflections of the Gibert Point in the sides of Triangle ABC are perspective.

The Anticomplementary Triangle and the Triangle of the reflections of the Center of the Orthocentroidal Circle in the sides of Triangle ABC are perspective.

The Anticomplementary Triangle and the Triangle of the reflections of the Skordev Point in the sides of Triangle ABC are perspective.

The Tangential Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are perspective.

The Tangential Triangle and the Triangle of the reflections of the Orthocenter in the sides of Triangle ABC are homothetic.

The Tangential Triangle and the Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC are perspective.

The Tangential Triangle and the Triangle of the reflections of the Kosnita Point in the sides of Triangle ABC are perspective.

The Tangential Triangle and the Triangle of the reflections of the Prasolov Point in the sides of Triangle ABC are perspective.

The Circum-Incentral Triangle and the Triangle of the reflections of the Incenter in the sides of Triangle ABC are homothetic.

The Circum-Incentral Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are perspective.

For any Triangle Center, the Circum-Orthic Triangle and the Triangle of the reflections of the Triangle Center in the sides of Triangle ABC are perspective.

The Half-Altitude Triangle and the Triangle of the reflections of the Orthocenter in the sides of Triangle ABC are perspective.

The Half-Altitude Triangle and the Triangle of the reflections of the Outer Fermat Point in the sides of Triangle ABC are perspective.

The Half-Altitude Triangle and the Triangle of the reflections of the Inner Fermat Point in the sides of Triangle ABC are perspective.

The Half-Altitude Triangle and the Triangle of the reflections of the de Longchamps Point in the sides of Triangle ABC are homothetic.

The Euler Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are homothetic.

The Euler Triangle and the Triangle of the reflections of the Orthocenter in the sides of Triangle ABC are perspective.

The Euler Triangle and the Triangle of the reflections of the Schoute Center in the sides of Triangle ABC are perspective.

The Intangents Triangle and the Triangle of the reflections of the Incenter in the sides of Triangle ABC are perspective.

The Intangents Triangle and the Triangle of the reflections of the Orthocenter in the sides of Triangle ABC are homothetic.

The Intangents Triangle and the Triangle of the reflections of the Clawson Point in the sides of Triangle ABC are perspective.

The Extangents Triangle and the Triangle of the reflections of the Orthocenter in the sides of Triangle ABC are homothetic.

The Extangents Triangle and the Triangle of the reflections of the Bevan Point in the sides of Triangle ABC are perspective.

The Extangents Triangle and the Triangle of the reflections of the Internal Center of Similitude of the Incircle and the Circumcircle in the sides of Triangle ABC are perspective.

The Fuhrmann Triangle and the Triangle of the reflections of the Circumcenter in the sides

of Triangle ABC are perspective.

The Reflection Triangle and the Triangle of the reflections of the Orthocenter in the sides of Triangle ABC are perspective.

The Reflection Triangle and the Triangle of the reflections of the Nine-Point Center in the sides of Triangle ABC are homothetic.

The Reflection Triangle and the Triangle of the reflections of the Outer Fermat Point in the sides of Triangle ABC are perspective.

The Reflection Triangle and the Triangle of the reflections of the Inner Fermat Point in the sides of Triangle ABC are perspective.

The First Brocard Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are perspective.

The Yff Central Triangle and the Triangle of the reflections of the Incenter in the sides of Triangle ABC are homothetic.

The Malfatti Squares Triangle and the Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC are homothetic.

The Malfatti Squares Triangle and the Triangle of the reflections of the Malfatti-Moses Point in the sides of Triangle ABC are perspective.

The Neuberg Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are perspective.

The Neuberg Triangle and the Triangle of the reflections of the Third Power Point in the sides of Triangle ABC are homothetic.

The Reflected Neuberg Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are perspective.

The Reflected Neuberg Triangle and the Triangle of the reflections of the Brocard Midpoint in the sides of Triangle ABC are homothetic.

The Hexyl Triangle and the Triangle of the reflections of the Incenter in the sides of Triangle ABC are homothetic.

The Johnson Triangle and the Triangle of the reflections of the Centroid in the sides of Triangle ABC are perspective.

The Johnson Triangle and the Triangle of the reflections of the Orthocenter in the sides of Triangle ABC are perspective.

The Johnson Triangle and the Triangle of the reflections of the Nine-Point Center in the sides of Triangle ABC are perspective.

The Johnson Triangle and the Triangle of the reflections of the de Longchamps Point in the sides of Triangle ABC are perspective.

The Johnson Triangle and the Triangle of the reflections of the Schiffler Point in the sides of Triangle ABC are perspective.

The Johnson Triangle and the Triangle of the reflections of the Exeter Point in the sides of Triangle ABC are perspective.

The Johnson Triangle and the Triangle of the reflections of the Far-Out Point in the sides of Triangle ABC are perspective.

The Johnson Triangle and the Triangle of the reflections of the Gibert Point in the sides of Triangle ABC are perspective.

The Johnson Triangle and the Triangle of the reflections of the Center of the Orthocentroidal Circle in the sides of Triangle ABC are perspective.

The Johnson Triangle and the Triangle of the reflections of the Skordev Point in the sides of Triangle ABC are perspective.

The Inner Johnson-Yff Triangle and the Triangle of the reflections of the Incenter in the sides of Triangle ABC are perspective.

The Inner Johnson-Yff Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are homothetic.

The Inner Johnson-Yff Triangle and the Triangle of the reflections of the Center of the Inner Johnson-Yff Circle in the sides of Triangle ABC are perspective.

The Outer Johnson-Yff Triangle and the Triangle of the reflections of the Incenter in the sides of Triangle ABC are perspective.

The Outer Johnson-Yff Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are homothetic.

The Outer Johnson-Yff Triangle and the Triangle of the reflections of the Center of the Outer Johnson-Yff Circle in the sides of Triangle ABC are perspective.

The Outer Fermat Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are perspective.

The Outer Fermat Triangle and the Triangle of the reflections of the Inner Fermat Point in the sides of Triangle ABC are perspective.

The Outer Fermat Triangle and the Triangle of the reflections of the First Isodynamic Point in the sides of Triangle ABC are perspective.

The Inner Fermat Triangle and the Triangle of the reflections of the Circumcenter in the

sides of Triangle ABC are perspective.

The Inner Fermat Triangle and the Triangle of the reflections of the Outer Fermat Point in the sides of Triangle ABC are perspective.

The Inner Fermat Triangle and the Triangle of the reflections of the Second Isodynamic Point in the sides of Triangle ABC are perspective.

The Outer Napoleon Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are perspective.

The Outer Napoleon Triangle and the Triangle of the reflections of the First Isodynamic Point in the sides of Triangle ABC are homothetic.

The Inner Napoleon Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are perspective.

The Inner Napoleon Triangle and the Triangle of the reflections of the Second Isodynamic Point in the sides of Triangle ABC are homothetic.

The Outer Vecten Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are perspective.

The Outer Vecten Triangle and the Triangle of the reflections of the Inner Kenmotu Point in the sides of Triangle ABC are homothetic.

The Inner Vecten Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are perspective.

The Inner Vecten Triangle and the Triangle of the reflections of the Outer Kenmotu Point in the sides of Triangle ABC are homothetic.

We specify prespectors provided they are basic points:

Triangle ABC and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are homothetic with homothetic center the Nine-Point Center.

Triangle ABC and the Triangle of the reflections of the Orthocenter in the sides of Triangle ABC are perspective with perspector the Orthocenter.

Triangle ABC and the Triangle of the reflections of the First Isodynamic Point in the sides of Triangle ABC are perspective with perspector the Outer Fermat Point.

Triangle ABC and the Triangle of the reflections of the Second Isodynamic Point in the sides of Triangle ABC are perspective with perspector the Inner Fermat Point.

The Medial Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are homothetic with homothetic center the Circumcenter.

The Orthic Triangle and the Triangle of the reflections of the Incenter in the sides of

Triangle ABC are perspective with perspector the Perspector of the Orthic Triangle and the Excentral Triangle.

The Orthic Triangle and the Triangle of the reflections of the Centroid in the sides of Triangle ABC are perspective with perspector the Perspector of the Orthic Triangle and the Anticomplementary Triangle.

The Orthic Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are perspective with perspector the Orthocenter of the Tangential Triangle.

The Orthic Triangle and the Triangle of the reflections of the Orthocenter in the sides of Triangle ABC are homothetic with homothetic center the Orthocenter.

The Orthic Triangle and the Triangle of the reflections of the Nine-Point Center in the sides of Triangle ABC are perspective with perspector the Orthocenter of the Orthic Triangle.

The Orthic Triangle and the Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC are perspective with perspector the Homothetic Center of the Orthic Triangle and the Tangential Triangle.

The Orthic Triangle and the Triangle of the reflections of the Inner Kenmotu Point in the sides of Triangle ABC are perspective with perspector the Outer Kenmotu Point.

The Orthic Triangle and the Triangle of the reflections of the Outer Kenmotu Point in the sides of Triangle ABC are perspective with perspector the Inner Kenmotu Point.

The Symmedial Triangle and the Triangle of the reflections of the First Brocard Point in the sides of Triangle ABC are perspective with perspector the Second Brocard Point.

The Symmedial Triangle and the Triangle of the reflections of the Second Brocard Point in the sides of Triangle ABC are perspective with perspector the First Brocard Point.

The Intouch Triangle and the Triangle of the reflections of the Incenter in the sides of Triangle ABC are homothetic with homothetic center the Incenter.

The Extouch Triangle and the Triangle of the reflections of the Bevan Point in the sides of Triangle ABC are homothetic with homothetic center the Bevan Point.

The Excentral Triangle and the Triangle of the reflections of the Incenter in the sides of Triangle ABC are homothetic with homothetic center the Perspector of the Orthic Triangle and the Excentral Triangle.

The Excentral Triangle and the Triangle of the reflections of the Bevan Point in the sides of Triangle ABC are perspective with perspector the Bevan Point.

The Anticomplementary Triangle and the Triangle of the reflections of the Centroid in the sides of Triangle ABC are perspective with perspector the Perspector of the Orthic Triangle and the Anticomplementary Triangle.

The Anticomplementary Triangle and the Triangle of the reflections of the Circumcenter in

the sides of Triangle ABC are homothetic with homothetic center the Orthocenter.

The Anticomplementary Triangle and the Triangle of the reflections of the de Longchamps Point in the sides of Triangle ABC are perspective with perspector the de Longchamps Point.

The Anticomplementary Triangle and the Triangle of the reflections of the Exeter Point in the sides of Triangle ABC are perspective with perspector the Symmedian Point of the Anticomplementary Triangle.

The Tangential Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are perspective with perspector the Circumcenter.

The Tangential Triangle and the Triangle of the reflections of the Orthocenter in the sides of Triangle ABC are homothetic with homothetic center the Gibert Point.

The Tangential Triangle and the Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC are perspective with perspector the Homothetic Center of the Orthic Triangle and the Tangential Triangle.

The Tangential Triangle and the Triangle of the reflections of the Kosnita Point in the sides of Triangle ABC are perspective with perspector the Orthocenter.

The Tangential Triangle and the Triangle of the reflections of the Prasolov Point in the sides of Triangle ABC are perspective with perspector the Circumcenter of the Tangential Triangle.

The Circum-Incentral Triangle and the Triangle of the reflections of the Incenter in the sides of Triangle ABC are homothetic with homothetic center the Inverse of the Incenter in the Circumcircle.

The Circum-Incentral Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are perspective with perspector the Circumcenter.

The Circum-Orthic Triangle and the Triangle of the reflections of the Centroid in the sides of Triangle ABC are perspective with perspector the Kiepert-Parry Point.

The Circum-Orthic Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are perspective with perspector the Kiepert-Parry Point.

The Circum-Orthic Triangle and the Triangle of the reflections of the Nine-Point Center in the sides of Triangle ABC are perspective with perspector the Kiepert-Parry Point.

The Circum-Orthic Triangle and the Triangle of the reflections of the de Longchamps Point in the sides of Triangle ABC are perspective with perspector the Kiepert-Parry Point.

The Circum-Orthic Triangle and the Triangle of the reflections of the Schiffler Point in the sides of Triangle ABC are perspective with perspector the Kiepert-Parry Point.

The Circum-Orthic Triangle and the Triangle of the reflections of the Exeter Point in the

sides of Triangle ABC are perspective with perspector the Kiepert-Parry Point.

The Circum-Orthic Triangle and the Triangle of the reflections of the Far-Out Point in the sides of Triangle ABC are perspective with perspector the Kiepert-Parry Point.

The Circum-Orthic Triangle and the Triangle of the reflections of the Gibert Point in the sides of Triangle ABC are perspective with perspector the Kiepert-Parry Point.

The Circum-Orthic Triangle and the Triangle of the reflections of the Center of the Orthocentroidal Circle in the sides of Triangle ABC are perspective with perspector the Kiepert-Parry Point.

The Circum-Orthic Triangle and the Triangle of the reflections of the Skordev Point in the sides of Triangle ABC are perspective with perspector the Kiepert-Parry Point.

The Half-Altitude Triangle and the Triangle of the reflections of the Orthocenter in the sides of Triangle ABC are perspective with perspector the Orthocenter.

The Half-Altitude Triangle and the Triangle of the reflections of the de Longchamps Point in the sides of Triangle ABC are homothetic with homothetic center the Skordev Point.

The Euler Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are homothetic with homothetic center the Center of the Orthocentroidal Circle.

The Euler Triangle and the Triangle of the reflections of the Orthocenter in the sides of Triangle ABC are perspective with perspector the Orthocenter.

The Euler Triangle and the Triangle of the reflections of the Schoute Center in the sides of Triangle ABC are perspective with perspector the Kiepert Center.

The Intangents Triangle and the Triangle of the reflections of the Incenter in the sides of Triangle ABC are perspective with perspector the Incenter.

The Extangents Triangle and the Triangle of the reflections of the Bevan Point in the sides of Triangle ABC are perspective with perspector the Bevan Point.

The Fuhrmann Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are perspective with perspector the Circumcenter.

The Reflection Triangle and the Triangle of the reflections of the Orthocenter in the sides of Triangle ABC are perspective with perspector the Orthocenter.

The Reflection Triangle and the Triangle of the reflections of the Nine-Point Center in the sides of Triangle ABC are homothetic with homothetic center the Circumcenter.

The Reflection Triangle and the Triangle of the reflections of the Outer Fermat Point in the sides of Triangle ABC are perspective with perspector the First Isodynamic Point.

The Reflection Triangle and the Triangle of the reflections of the Inner Fermat Point in the

sides of Triangle ABC are perspective with perspector the Second Isodynamic Point.

The First Brocard Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are perspective with perspector the Circumcenter.

The Malfatti Squares Triangle and the Triangle of the reflections of the Malfatti-Moses Point in the sides of Triangle ABC are perspective with perspector the Malfatti-Moses Point.

The Neuberg Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are perspective with perspector the Circumcenter.

The Neuberg Triangle and the Triangle of the reflections of the Third Power Point in the sides of Triangle ABC are homothetic with homothetic center the Brocard Midpoint.

The Reflected Neuberg Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are perspective with perspector the Circumcenter.

The Reflected Neuberg Triangle and the Triangle of the reflections of the Brocard Midpoint in the sides of Triangle ABC are homothetic with homothetic center the Third Power Point.

The Hexyl Triangle and the Triangle of the reflections of the Incenter in the sides of Triangle ABC are homothetic with homothetic center the Incenter.

The Johnson Triangle and the Triangle of the reflections of the Centroid in the sides of Triangle ABC are perspective with perspector the Kiepert-Parry Point.

The Johnson Triangle and the Triangle of the reflections of the Orthocenter in the sides of Triangle ABC are perspective with perspector the Kiepert-Parry Point.

The Johnson Triangle and the Triangle of the reflections of the Nine-Point Center in the sides of Triangle ABC are perspective with perspector the Kiepert-Parry Point.

The Johnson Triangle and the Triangle of the reflections of the de Longchamps Point in the sides of Triangle ABC are perspective with perspector the Kiepert-Parry Point.

The Johnson Triangle and the Triangle of the reflections of the Schiffler Point in the sides of Triangle ABC are perspective with perspector the Kiepert-Parry Point.

The Johnson Triangle and the Triangle of the reflections of the Exeter Point in the sides of Triangle ABC are perspective with perspector the Kiepert-Parry Point.

The Johnson Triangle and the Triangle of the reflections of the Far-Out Point in the sides of Triangle ABC are perspective with perspector the Kiepert-Parry Point.

The Johnson Triangle and the Triangle of the reflections of the Gibert Point in the sides of Triangle ABC are perspective with perspector the Kiepert-Parry Point.

The Johnson Triangle and the Triangle of the reflections of the Center of the Orthocentroidal Circle in the sides of Triangle ABC are perspective with perspector the

Kiepert-Parry Point.

The Johnson Triangle and the Triangle of the reflections of the Skordev Point in the sides of Triangle ABC are perspective with perspector the Kiepert-Parry Point.

The Inner Johnson-Yff Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are homothetic with homothetic center the Second Feuerbach Point.

The Inner Johnson-Yff Triangle and the Triangle of the reflections of the Center of the Inner Johnson-Yff Circle in the sides of Triangle ABC are perspective with perspector the Center of the Inner Johnson-Yff Circle.

The Outer Johnson-Yff Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are homothetic with homothetic center the First Feuerbach Point.

The Outer Johnson-Yff Triangle and the Triangle of the reflections of the Center of the Outer Johnson-Yff Circle in the sides of Triangle ABC are perspective with perspector the Center of the Outer Johnson-Yff Circle.

The Outer Fermat Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are perspective with perspector the Circumcenter.

The Outer Fermat Triangle and the Triangle of the reflections of the Inner Fermat Point in the sides of Triangle ABC are perspective with perspector the Second Isodynamic Point.

The Outer Fermat Triangle and the Triangle of the reflections of the First Isodynamic Point in the sides of Triangle ABC are perspective with perspector the Outer Fermat Point.

The Inner Fermat Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are perspective with perspector the Circumcenter.

The Inner Fermat Triangle and the Triangle of the reflections of the Outer Fermat Point in the sides of Triangle ABC are perspective with perspector the First Isodynamic Point.

The Inner Fermat Triangle and the Triangle of the reflections of the Second Isodynamic Point in the sides of Triangle ABC are perspective with perspector the Inner Fermat Point.

The Outer Napoleon Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are perspective with perspector the Circumcenter.

The Outer Napoleon Triangle and the Triangle of the reflections of the First Isodynamic Point in the sides of Triangle ABC are homothetic with homothetic center the Second Isodynamic Point.

The Inner Napoleon Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are perspective with perspector the Circumcenter.

The Inner Napoleon Triangle and the Triangle of the reflections of the Second Isodynamic Point in the sides of Triangle ABC are homothetic with homothetic center the First

Isodynamic Point.

The Outer Vecten Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are perspective with perspector the Circumcenter.

The Outer Vecten Triangle and the Triangle of the reflections of the Inner Kenmotu Point in the sides of Triangle ABC are homothetic with homothetic center the Outer Kenmotu Point.

The Inner Vecten Triangle and the Triangle of the reflections of the Circumcenter in the sides of Triangle ABC are perspective with perspector the Circumcenter.

The Inner Vecten Triangle and the Triangle of the reflections of the Outer Kenmotu Point in the sides of Triangle ABC are homothetic with homothetic center the Inner Kenmotu Point.

Triangle of Reflections of the Symmedian Point

Given any triangle, we could use the Machine for Questions and Answers to find perspectives between the triangle and other triangles. For example, we could consider the Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC. The Machine for Questions and Answers finds perspectives:

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Orthic Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Tangential Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Pedal Triangle of the Orthocenter.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Pedal Triangle of the Symmedian Point.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Antipedal Triangle of the Centroid.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Antipedal Triangle of the Circumcenter.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Antipedal Triangle of the Schoute Center.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Circum-Orthic Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Malfatti Squares Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is

homothetic to the Malfatti Squares Triangle of the Medial Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Pedal Triangle of the Symmedian Point of the Medial Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Antipedal Triangle of the Centroid of the Medial Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Circumcevian Triangle of the Exeter Point of the Medial Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Tangential Triangle of the Anticomplementary Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Pedal Triangle of the Symmedian Point of the Anticomplementary Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Antipedal Triangle of the Centroid of the Anticomplementary Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Antipedal Triangle of the Circumcenter of the Anticomplementary Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Malfatti Squares Triangle of the Anticomplementary Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Medial Triangle of the Circum-Medial Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Pedal Triangle of the Circumcenter of the Circum-Medial Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Orthic Triangle of the Euler Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Medial Triangle of the Malfatti Squares Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Tangential Triangle of the Fourth Brocard Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Anticomplementary Triangle of the Malfatti Squares Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Tangential Triangle of the Johnson Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is

homothetic to the Malfatti Squares Triangle of the Euler Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Euler Triangle of the Malfatti Squares Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Johnson Triangle of the Malfatti Squares Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Inner Johnson-Yff Triangle of the Malfatti Squares Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Outer Johnson-Yff Triangle of the Malfatti Squares Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Malfatti Squares Triangle of the Johnson Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Malfatti Squares Triangle of the Inner Johnson-Yff Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Malfatti Squares Triangle of the Outer Johnson-Yff Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Pedal Triangle of the Orthocenter of the Euler Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Pedal Triangle of the Symmedian Point of the Euler Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Pedal Triangle of the Schoute Center of the First Brocard Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Pedal Triangle of the Symmedian Point of the Fourth Brocard Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Pedal Triangle of the Circumcenter of the Malfatti Squares Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Pedal Triangle of the Symmedian Point of the Johnson Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Pedal Triangle of the Symmedian Point of the Inner Johnson-Yff Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Pedal Triangle of the Symmedian Point of the Outer Johnson-Yff Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is

homothetic to the Antipedal Triangle of the Centroid of the Euler Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Antipedal Triangle of the Circumcenter of the Fourth Brocard Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Antipedal Triangle of the Third Power Point of the Fourth Brocard Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Antipedal Triangle of the Orthocenter of the Malfatti Squares Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Antipedal Triangle of the Centroid of the Johnson Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Antipedal Triangle of the Circumcenter of the Johnson Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Antipedal Triangle of the Centroid of the Inner Johnson-Yff Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Antipedal Triangle of the Centroid of the Outer Johnson-Yff Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Circum-Orthic Triangle of the Euler Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Circumcevian Triangle of the Circumcenter of the First Brocard Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Circumcevian Triangle of the Circumcenter of the Malfatti Squares Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Triangle of the Circumcenters of the Triangulation Triangles of the Centroid.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Triangle of the Symmedian Points of the Triangulation Triangles of the Centroid.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Triangle of the Symmedian Points of the Triangulation Triangles of the Orthocenter.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Triangle of the Orthocenters of the Triangulation Triangles of the

Symmedian Point.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Triangle of the Orthocenters of the Triangulation Triangles of the Outer Fermat Point.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Triangle of the Orthocenters of the Triangulation Triangles of the Inner Fermat Point.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Triangle of the Symmedian Points of the Triangulation Triangles of the Far-Out Point.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Triangle of the Circumcenters of the Triangulation Triangles of the Schoute Center.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Stevanovic Triangle of the Prasolov Points of the Triangulation triangles of the Incenter.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Stevanovic Triangle of the Symmedian Points of the Triangulation triangles of the Centroid.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Stevanovic Triangle of the Orthocenters of the Triangulation triangles of the Orthocenter.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Stevanovic Triangle of the Orthocenters of the Triangulation triangles of the Symmedian Point.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Stevanovic Triangle of the Symmedian Points of the Triangulation triangles of the Far-Out Point.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Stevanovic Triangle of the Inner Vecten Points of the Triangulation triangles of the Inner Kenmotu Point.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Triangle of the Symmedian Points of the Corner Triangles of the Orthocenter.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Triangle of the Symmedian Points of the Anticevian Corner Triangles of the Orthocenter.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Triangle of the Inner Vecten Points of the Anticevian Corner Triangles of the Inner Kenmotu Point.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Triangle of the Inner Vecten Points of the Anticevian Corner Triangles of the Outer Kenmotu Point.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Triangle of the reflections of the Symmedian Point in the sides of the Medial Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Triangle of the reflections of the Symmedian Point in the sides of the Anticomplementary Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Triangle of the reflections of the Orthocenter in the vertices of the Orthic Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Triangle of the reflections of the de Longchamps Point in the vertices of the Tangential Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Triangle of the reflections of the vertices of the Medial Triangle in the Center of the Brocard Circle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Triangle of the reflections of the vertices of the Orthic Triangle in the Orthocenter.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Triangle of the reflections of the vertices of the Tangential Triangle in the Nine-Point Center.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Triangle of the reflections of the vertices of the Tangential Triangle in the Center of the Brocard Circle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Half-Symmedial Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Triangle of the reflections of the Orthocenter in the sides of Triangle ABC.

For any Triangle Center, the Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Hatzipolakis Triangle of the Triangle Center.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Desmic Mate the Fourth Brocard Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Outer Apollonius Triangle of the Lucas Circles of the Orthic Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Outer Apollonius Triangle of the Lucas Circles of the Tangential Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Outer Apollonius Triangle of the Lucas Circles of the Pedal Triangle of the Orthocenter.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Outer Apollonius Triangle of the Lucas Circles of the Pedal Triangle of the Symmedian Point.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Outer Apollonius Triangle of the Lucas Circles of the Antipedal Triangle of the Centroid.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Outer Apollonius Triangle of the Lucas Circles of the Antipedal Triangle of the Circumcenter.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Outer Apollonius Triangle of the Lucas Circles of the Antipedal Triangle of the Schoute Center.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is perspective with the Outer Apollonius Triangle of the Lucas Circles of the Circum-Orthic Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC is homothetic to the Outer Apollonius Triangle of the Lucas Circles of the Malfatti Squares Triangle.

We specify prespectors provided they are basic points:

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Orthic Triangle are perspective with perspector the Homothetic Center of the Orthic Triangle and the Tangential Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Tangential Triangle are perspective with perspector the Homothetic Center of the Orthic Triangle and the Tangential Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Pedal Triangle of the Orthocenter are perspective with perspector the Homothetic Center of

the Orthic Triangle and the Tangential Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Pedal Triangle of the Symmedian Point are homothetic with homothetic center the Symmedian Point.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Antipedal Triangle of the Circumcenter are perspective with perspector the Homothetic Center of the Orthic Triangle and the Tangential Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Circumcevian Triangle of the Exeter Point of the Medial Triangle are perspective with perspector the Homothetic Center of the Orthic Triangle and the Tangential Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Pedal Triangle of the Symmedian Point of the Anticomplementary Triangle are homothetic with homothetic center the Symmedian Point of the Medial Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Medial Triangle of the Circum-Medial Triangle are perspective with perspector the Centroid.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Pedal Triangle of the Circumcenter of the Circum-Medial Triangle are perspective with perspector the Centroid.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Tangential Triangle of the Fourth Brocard Triangle are perspective with perspector the Homothetic Center of the Orthic Triangle and the Tangential Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Antipedal Triangle of the Circumcenter of the Fourth Brocard Triangle are perspective with perspector the Homothetic Center of the Orthic Triangle and the Tangential Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Circum-Orthic Triangle of the Euler Triangle are perspective with perspector the Homothetic Center of the Orthic Triangle and the Tangential Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Circumcevian Triangle of the Circumcenter of the First Brocard Triangle are perspective with perspector the Symmedian Point.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Triangle of the Circumcenters of the Triangulation Triangles of the Centroid are homothetic with homothetic center the Schoute Center.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Triangle of the Symmedian Points of the Triangulation Triangles of the Centroid are perspective with perspector the Centroid.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Triangle of the Symmedian Points of the Triangulation Triangles of the Orthocenter are perspective with perspector the Homothetic Center of the Orthic Triangle and the Tangential Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Triangle of the Orthocenters of the Triangulation Triangles of the Symmedian Point are perspective with perspector the Symmedian Point.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Triangle of the Symmedian Points of the Triangulation Triangles of the Far-Out Point are perspective with perspector the Homothetic Center of the Orthic Triangle and the Tangential Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Stevanovic Triangle of the Prasolov Points of the Triangulation triangles of the Incenter are perspective with perspector the Homothetic Center of the Orthic Triangle and the Tangential Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Stevanovic Triangle of the Symmedian Points of the Triangulation triangles of the Centroid are perspective with perspector the Centroid.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Stevanovic Triangle of the Orthocenters of the Triangulation triangles of the Orthocenter are perspective with perspector the Homothetic Center of the Orthic Triangle and the Tangential Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Stevanovic Triangle of the Orthocenters of the Triangulation triangles of the Symmedian Point are homothetic with homothetic center the Symmedian Point.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Stevanovic Triangle of the Symmedian Points of the Triangulation triangles of the Far-Out Point are perspective with perspector the Centroid.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Stevanovic Triangle of the Inner Vecten Points of the Triangulation triangles of the Inner Kenmotu Point are perspective with perspector the Homothetic Center of the Orthic Triangle and the Tangential Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Triangle of the Symmedian Points of the Corner Triangles of the Orthocenter are homothetic with homothetic center the Symmedian Point.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Triangle of the reflections of the Symmedian Point in the sides of the Medial Triangle are perspective with perspector the Symmedian Point.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the

Triangle of the reflections of the Symmedian Point in the sides of the Anticomplementary Triangle are perspective with perspector the Symmedian Point.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Triangle of the reflections of the vertices of the Medial Triangle in the Center of the Brocard Circle are perspective with perspector the Symmedian Point.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Triangle of the reflections of the vertices of the Tangential Triangle in the Center of the Brocard Circle are perspective with perspector the Symmedian Point.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Hatzipolakis Triangle of the Circumcenter are homothetic with homothetic center the Outer Kenmotu Point.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Hatzipolakis Triangle of the Symmedian Point are homothetic with homothetic center the Symmedian Point.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Hatzipolakis Triangle of the Inner Kenmotu Point are homothetic with homothetic center the Third Power Point.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Outer Apollonius Triangle of the Lucas Circles of the Orthic Triangle are perspective with perspector the Homothetic Center of the Orthic Triangle and the Tangential Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Outer Apollonius Triangle of the Lucas Circles of the Tangential Triangle are perspective with perspector the Homothetic Center of the Orthic Triangle and the Tangential Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Outer Apollonius Triangle of the Lucas Circles of the Pedal Triangle of the Orthocenter are perspective with perspector the Homothetic Center of the Orthic Triangle and the Tangential Triangle.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Outer Apollonius Triangle of the Lucas Circles of the Pedal Triangle of the Symmedian Point are homothetic with homothetic center the Symmedian Point.

The Triangle of the reflections of the Symmedian Point in the sides of Triangle ABC and the Outer Apollonius Triangle of the Lucas Circles of the Antipedal Triangle of the Circumcenter are perspective with perspector the Homothetic Center of the Orthic Triangle and the Tangential Triangle.

Note

The Machine for Questions and Answers could identify the other perspectors upon request.

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

We use the definitions in accordance with [1 - 5] 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.

Thanks

The figures in this note are produced by using the program C.a.R. (Compass and Ruler), an amazing program created by Rene Grothmann. The Grothmann's program is available for download in the Web: Rene Grothmann's C.a.R.. It is free and open source. The reader may verify easily the statements of this paper by using C.a.R. Many thanks to Rene Grothmann for his wonderful program.

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