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Making Connections about Geometric Drawing in Drawing Classes of General Education Schools

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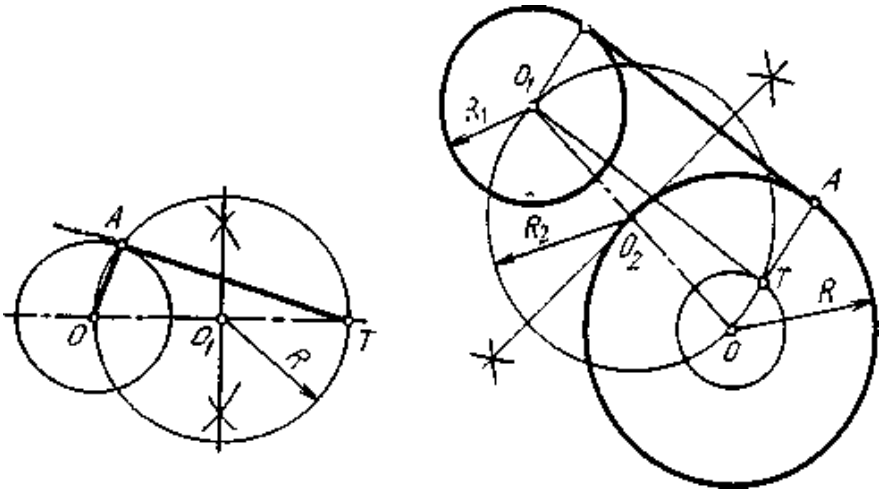
Annotation: When drawing contours of details, it is necessary to describe the smooth transition of a straight line with a circle or between two circles. Such a smooth transition is called a conjunction. The point where the straight line and the arcs of the circle smoothly cross each other is called the connection (transition) 0 center points, the center of the connection, which ensures the connection.

Key words: individual, composition, engineering, computer, communication, monitoring.

When trying to transfer from a point T outside the circle to a circle, the center of the circle 0 is connected to the point T, and the distance OT is divided into two equal parts. From point 0, a circular arc passing through points 0 and T is drawn, and point A intersecting the circle is connected to 0. If points T and A are connected, the circle is attempted from point T (AT X OA).

To test two circles of different radii, their centers are connected and the distance 00.) is divided equally. An auxiliary passing through the centers of both circles from point 02. If an auxiliary small circle is drawn from 0 with radius K.-K,), then the auxiliary circle drawn from 02 intersects the auxiliary circle at point T. If the points O^ and T are joined, a line intersecting the auxiliary small circle is formed. If the points 0 and T are connected and continued, it intersects the circle with center 0 at A. By drawing a parallelogram from O^ to OA, a point V is found on the circle with center O^. If points A and V are connected, two circles will be attempted.



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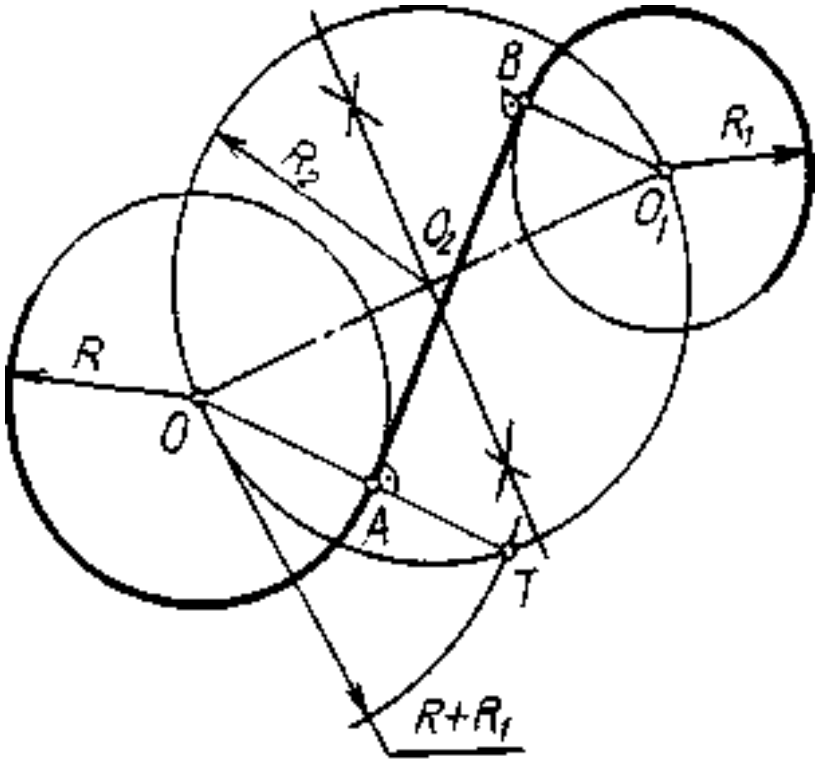
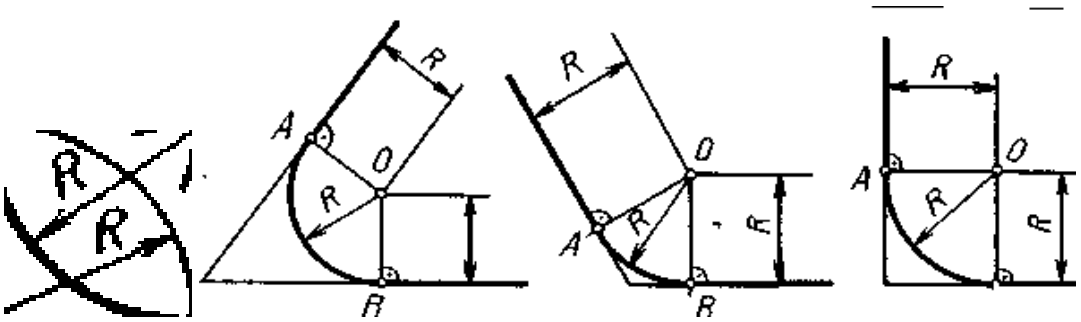


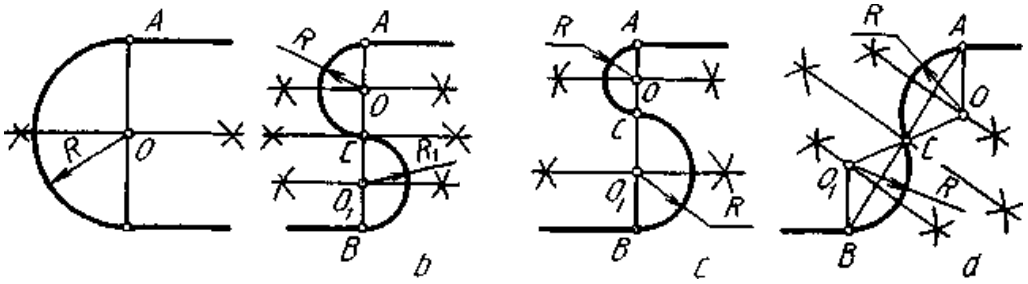
When testing two circles with different diameters at a distance of 00^, their centers are connected, and the distance 00 <\ is divided into two equal parts. An auxiliary circle passing through 0 and O^ is drawn from point 02. An auxiliary circle passing through 0 and O^ is drawn from point 0. An auxiliary circular arc with radius K+K^ is drawn from point 0 and point T is found. Points T and 0 are connected and point A is formed. Point V is determined by drawing a parallel from 0 to OT. Points A and V are connected, and circles are attempted. Rounding the corners. Two straight lines intersect to form an acute, obtuse, right angle.

To round them with a circular arc, straight lines parallel to them are drawn on the inner sides of the corner at a distance of the radius of rounding K, and they are intersected. Then the connection center 0 is formed. From 0, perpendicular to the corner sides, connecting points A and V are found. The angle through point 0 is rounded. When rounding a right angle, the radius of rounding from point T is K. by drawing an arc equal to , determining the transition points A and V, and then drawing arcs from A and V again with the same radius, the center of connection 0 is found.

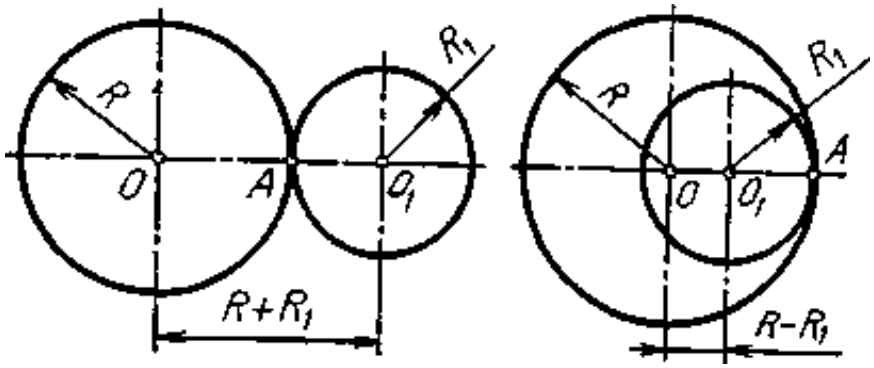


If two straight lines are parallel to each other, an auxiliary line perpendicular to both is drawn to round them. A and B are bisected is divided, the rounding center is 0. Here, one return has a rounding radius. If it is necessary to round parallel straight lines in two radii, then the rounding

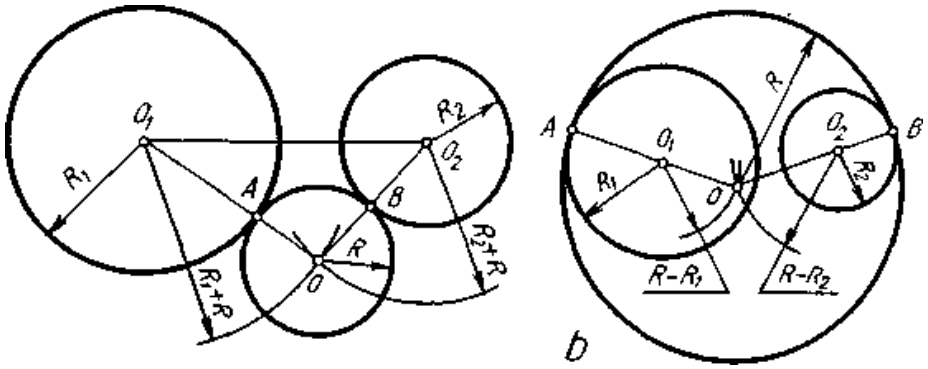
radius can be equal or different from each other. If the crossing points of parallel straight lines are not perpendicular to them, but have the same radius of rounding on the oblique line, the point C is found by bisecting AB. AC and BC are also divided into two, and the connection centers 0 and 0 are determined.



The point of intersection of two circles lies on the line connecting their centers. If two circles touch each other with their outer sides, it is called an external connection, and if the smaller circle touches the inside of the larger circle, it is called an internal connection. In the external connection, the center of the circle is equal to K+K^, and in the internal connection, their distance is equal to K-K.-].

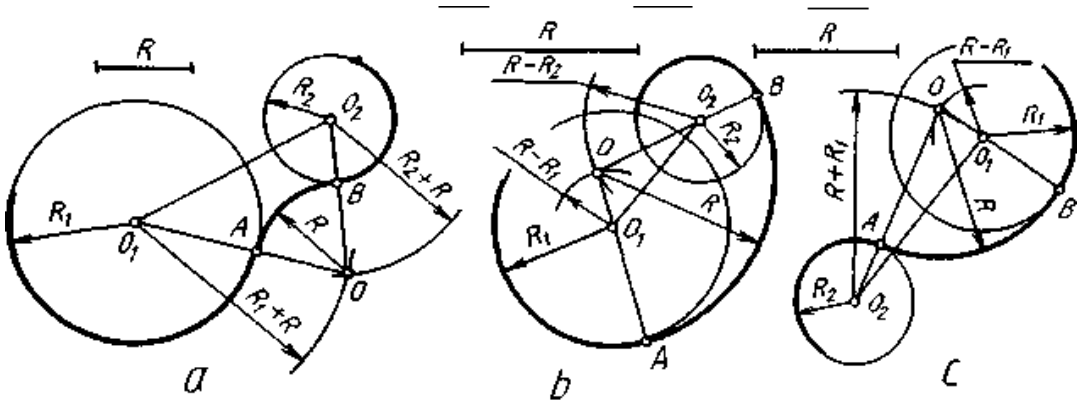


Circles with centers O^ ,0^ are formed by crossing the outer side of the third circle with center 0. To find the center 0 in the outer joint, an arc with a radius of K+K^ from 0, and an arc with a radius of K+V.2 from 02 are drawn and intersected. In determining the center 0 in the internal connection, the arcs drawn from O^ to K.-K.^ ,0^ to K-K^ RaDiUs are intersected.



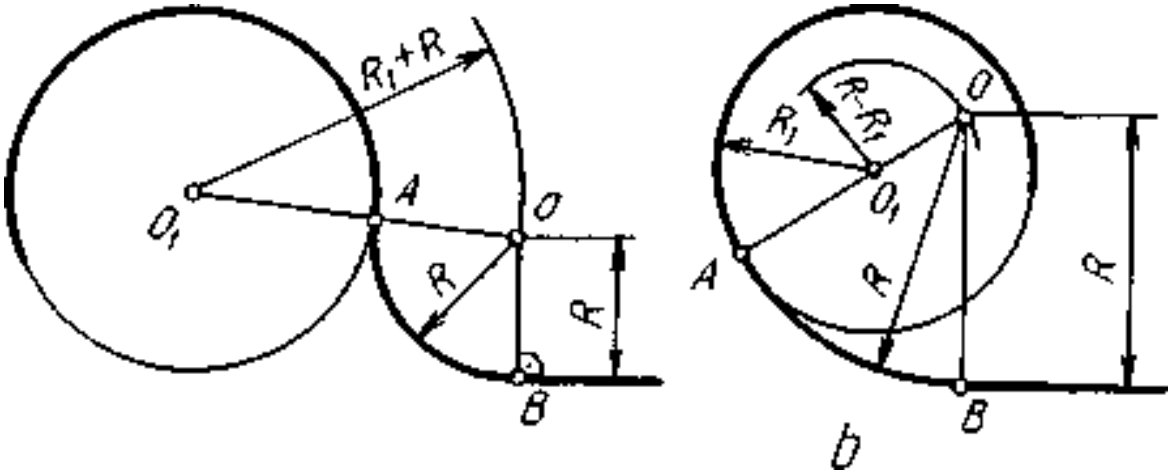
To externally connect two circles with a given radius K, draw arcs with radii from O^ to K+K^ .02 to K+K.^ and find the center of connection 0. In the internal connection of these circles, the following condition should be obtained, that is, given K>K^K^~0^ 02 /2. Now, arcs with radii from (X| to K-N.^ ,0^ to ^"^ are drawn and intersected, the center of the connection is determined

0. In the external connection, the transition points A and V are between 00^ and 002, in the internal connection it is A and V points are defined in the continuations of 00 ^ and o.



Connecting one of the circles with external and internal compound connection at the given radius is K.>0^ 02 +K^K2 /2 only if 0-| from K-K^ ,0? arcs with radii K+K2 are drawn from and intersected. During 00^, the transition points V between A, 002 are found and the connection with radius K from 0 is performed.

Connection of a straight line with a circle. The given connection radius is K. at a distance, an auxiliary line is drawn parallel to the straight line and intersects it with an arc drawn from the center with radii K+K^ or K-K^. As a result, point 0 is found, and a straight line is drawn from it, and the transition point V is determined. In the external connection, the transition point A is between the centers, that is, between 0 and 0-], in the internal connection between 0 and 0| is determined during.



Making oval and ovoid. An oval is an elliptic curve, and to draw it through the major axes AV and minor SO, mutually perpendicular axes of symmetry are drawn. Point A is moved to the minor axis with radius OA and point A is connected to O. From the point O, the point E is moved to AO on the radius OE, and the resulting section AE is bisected. Then the points O^ on OA, 02 on OS are determined and they are transferred to OV and OO, 05 and O^. is defined as 02 and 03 ,0^. and 05 and O^ and 0/ are connected and continued. O^ A is 14 arcs in radius, O^ S is 12 arcs in radius, O^ V is in radius 23 arcs, 34 arcs are drawn in a row with a radius of 02 O.

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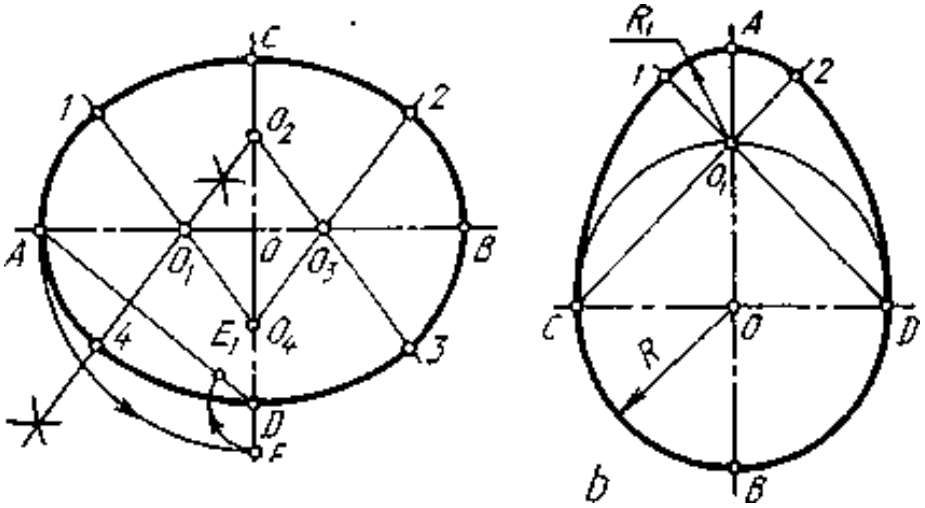
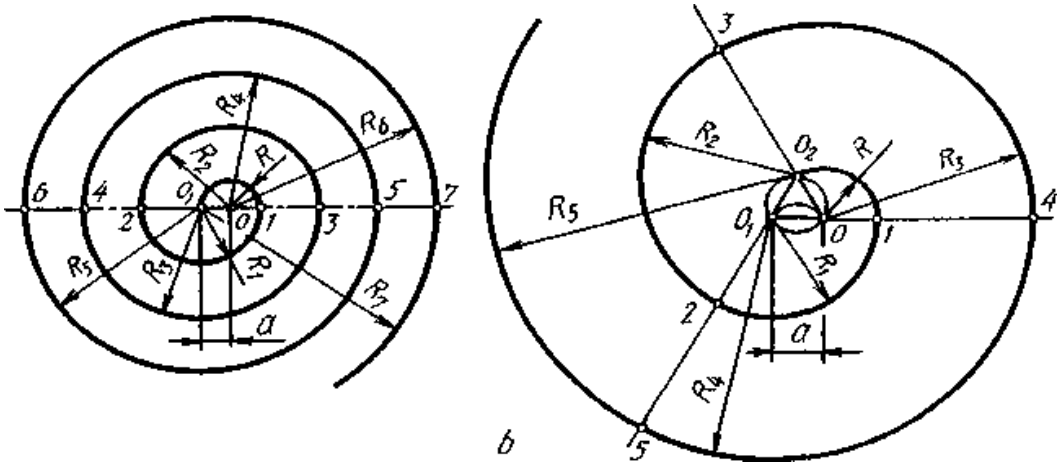


An ovoid is a curve with an ovoid contour, and it is convenient to draw it through the minor axis SO. A circle with a diameter of SO is drawn, and its intersection with the major axis AV is marked as O^. S and O^, O and O^ are connected and continued. From point O, 12 arcs with radius OS are drawn from point S1,0^ with radius O^ V, and 2O arcs with radius SO are drawn from point S.



An open and smooth curve made of circular arcs drawn with different radii is called a winding. Urama can be drawn using two or more centers. To draw a two-center winding, a semicircle with radius 0 to K (OO^), a semicircle with radius O^ to K^ (01), and semicircles with radius 0 to RC (02) are drawn. Begin by drawing a three-center coil from center O^ with radius K^ (0 O^). Then arcs are drawn from 02 to K.^ (02 1) with a radius, and from O^ to K^ (O^ 2) with a radius. Draw arches (domes). In Central Asia, masters drew drawings of arches mainly using squares.

To draw a simple arc, at points 0 of an arbitrary 00 cross section, a selected cross section with a radius of 00 is drawn until the arcs intersect. Arcs are drawn from the center of the square from 0 to its diagonals at a radius of K, then from O^ to K^ until they intersect, for a radius of K^, centers 02, 03 are sought on the diagonals of the square.

Conclusion

Most of these requirements are interrelated, one logically follows from the other, and the existence of one determines the need for the other. If the above students try their best to fulfill each newly created new literature, it will contribute to the increase in the quality and efficiency of education.

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