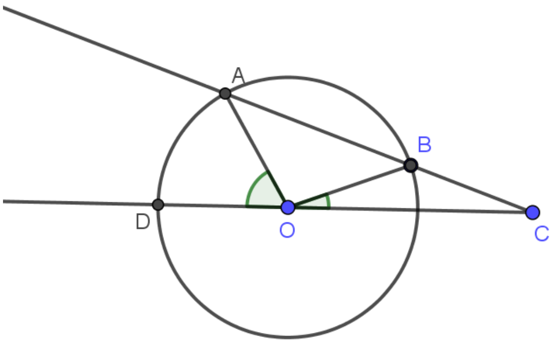
Given: the circle with the center O and two secants AB and DO which intersect at point C, as shown in the graph below:



Prove:

If IBCI=IBOI

then $|\angle DOA| = 3|\angle COB|$

Finish the "Table of proof":

Statement:	Explanation:
1. IBOI = IBCI = x	Given.
2. ΔOBC is an ……………….. triangle.	From 1.
3. <BOC = <BCO = α	From 2.
4. <OBC = …………………..	Angles in the triangle OBC add up to 180°.
5. <OBA = 2α	………………………….. angles.
6. …………. = IOBI	Ratios of the circle (circumference).
7. ΔAOB is an isosceles triangle.	From ……….
8. <OAB = ………….. = 2α	From 7.
9. <AOB = ………………………..	Angles in the triangle AOB add up to 180°.
10. Let <DOA = β $< \beta$ + ………. + ………. = ……….	 Angles add up to a straight angle.
Hence: $< \beta =$ ………	**quod erat demonstrandum (Q.E.D.)** ☺☺