# SOLUTIONS EXERCISES I GEOMETRY

In this document, the final result of the proposed exercises is indicated so that the student can check their solutions, however, we emphasize the importance of the solving process that will be explained in the classroom for some of the exercises proposed.

1. 142° 49’ 12’’, 7° 35’ 38’’

2. 40° 38’ 16’’

3. 15° 34’ 56’’

4. 40° and 58°

5. 8° 46’ 34’’ and 2’’ remains

6. 72° 17’ 56.5’’

7. 125° 15’ 29’’

8. 111° 14’

9. 20°

10. 80°, 50° y 50°

11. 125°

12. 68°

13. Using the result of two parallels and a transversal line

14. 105°

15. a. 108°, 121° 30’, b.49° 30’, c. 65° 15’, d. 90°

16. A measure between 6 and 14cm. With the measure of 10 cm the triangle is isosceles.

17. 157° 30’

18. 140°

19. 108°, 36° y 36°

20. 120°, 30°, y 45°

21. Explain on your own words. For example: First of all you should take the compass and draw a circle with center in the point that cut the line in two points, call them A and B, then you should draw the perpendicular bisector of segment AB.

22. 76° 16’ 31’’, 24°20’ 51’’, 201° 14’ 44’’ and 12° 58’ 55’’

23. 20° 48’ 33’’ and the exterior angle is 159° 11’ 27’’

24. 90°, 90°, 138° 42’ 37’’

25. 500’=8° 20’ < 84° 25’ 7’’< 91° 40’ 1’’ =330001’’

26. Explain on your own words. For example: Draw a segment AB, then do the perpendicular bisector of AB and select the intersection between the perpendicular bisector of AB and the segment AB, call it C. Open the compass the longitude of AB and do a circle with center in C, select the intersection between the perpendicular bisector and the circle, call them D and E. Finally, you should join the points: A, D, B and E.

27. a.90°, 90°, 66° 17’ 56’’ b.48° 57’ and 4’’ remains c.23° 42’ 4’’ d.90

28. 37° 15’ 36’’