MATH'S WORKSHEET

(1) Yes, according to the triangle inequality property $a > b - c$

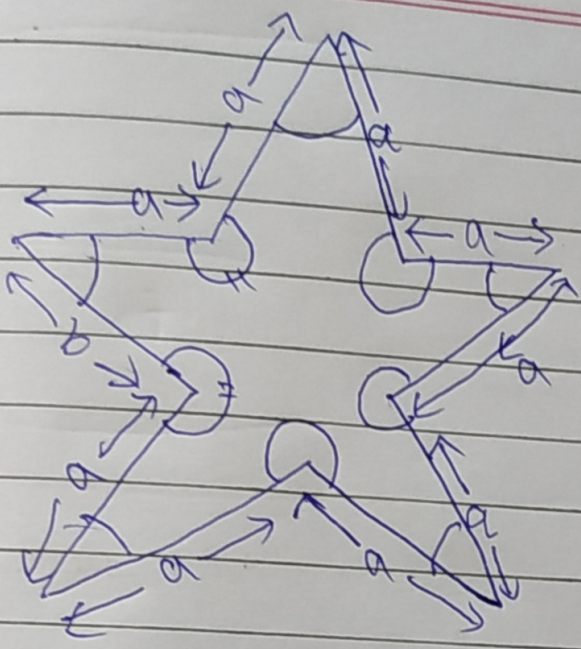
(2) No, according to the triangle inequality property a cannot be equal to some of b+c

(3) The areas of parallelograms on the same base and between the same parallel lines are equal

(4) Yes
In a regular polygon, all the extension angles are equal as a result the defination of a regular polygon tells that all the sides and included angles are equal
the condition is

(5) No it is not mandatory that sum of two angles is less than the third side as in an isosceles triangle the two angles of the two equals sides are equal and in equilateral triangle all the angles are equal. In scalene triangle all the angles are unequal
Hence proved the condition is only possible in scalene and isosceles triangle.

(6) No the given statement is not true because the given statement/condition is not suitable in all the polygons having equal no of sides. Let us take a example of a decagon having equal length of all sides



STRUCTURE OF A STAR (DECAGON)

Observation :- It is clearly seen that the interior angles are not equal

Hence, proved that if a polygon having all the sides equal, it doesn't state that all the interior angles must be equal

(7) If a circle passes through four points, then the four points are said to be concyclic

(8) Two circles cannot intersect in more than two points. True

(9) Two quadrilaterals of equal perimeters occupy equal. No the statement is not suitable in all the cases because the perimeter may be equal but the sides can be unequal