

New Concepts

- Triangle Congruence

Problem Set #19

“The A mathematician is a person who can find analogies between theorems; a better mathematician is one who can see analogies between proofs and the best mathematician can notice analogies between theories.”

- Stefan Banach

New Postulates and Theorems

SSS Postulate – If three sides of one triangle are congruent to three sides of another triangle, then the triangles are congruent. (postulate 12)

SAS Postulate – If two sides and the included angle of one triangle are congruent to two sides and the included angle of another triangle, then the triangles are congruent. (postulate 13)

ASA Postulate – If two angles and the included side of one triangle are congruent to two angles and the included side of another triangle, then the triangles are congruent. (postulate 14)

Exercises:

p.124 #1-23

Problems:

A • • B

19-1 Irrational Numbers

Using only a compass and a straightedge, construct the following lengths using the given points A and B above:

- (a)  $2 \cdot AB$
- (b)  $3 \cdot AB$
- (c)  $\sqrt{2} \cdot AB$
- (d)  $\sqrt{3} \cdot AB$