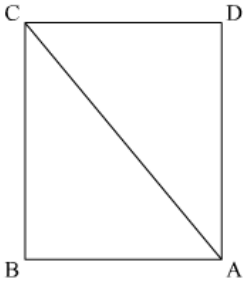
Congruent Triangles Ex 10.6 Q9

Answer :

(1) We have to prove that $CD + DA + AB + BC > 2AC$



In ΔABC we have

$AB + BC > AC$ (As sum of two sides of triangle is greater than third one) .....(1)

In ΔACD we have

$AD + CD > AC$ (As sum of two sides of triangle is greater than third one) .....(2)

Hence

Adding (1) & (2) we get

$\boxed{AB + BC + AC + CD > 2AC}$ Proved.

(2) We have to prove that $CD + DA + AB > BC$

In ΔACD we have

$CD + DA > CA$ (As sum of two sides of triangle is greater than third one)

$\Rightarrow CD + DA + AB > CA + AB$ (Adding AB both sides)

$\boxed{CD + DA + AB > BC}$ Proved.

Congruent Triangles Ex 10.6 Q10

Answer :

(1) F

(2) T

(3) T

(4) F

(5) T

(6) T

Congruent Triangles Ex 10.6 Q11

Answer :

(1) Largest

(2) Less

(3) Greater

(4) Smaller

(5) Less

(6) Greater

********** END **********