Congruence Ex 16.2 Q7

Answer:

In \triangle ABC and \triangle BAD we have,

AC = BD (given)

BC = AD (given)

and AB = BA (common)

Therefore by SSS criterion of congruency, $\triangle ABC \cong \triangle BAD$.

There option (iii) is true.

Congruence Ex 16.2 Q8

Answer:

We have AB = AC.

Also since D is the midpoint of BC, BD = DC.

And AD = DA.

Therefore by SSS condition, $\triangle ABD \cong \triangle ADC$.

We have used AB, AC: BD, DC and AD, DA.

Congruence Ex 16.2 Q9

Answer:

Yes \triangle $ABC \cong \triangle$ ACB by SSS condition.

Since ABC is an isosceles triangle, AB = AC, BC = CB and AC = AB.

Congruence Ex 16.2 Q10

Answer:

Yes.

In ABC and ADBC

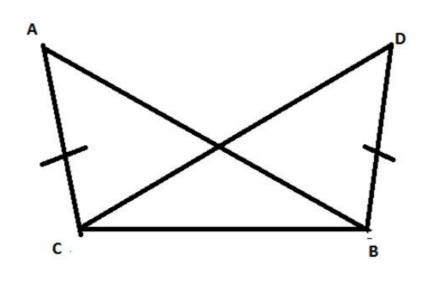
AB=DB (Given)

AC=DC (Given)

BC=BC (Common)

By SSS criterion of congruency, △ABC≅△DBC

No, $\angle ABD$ and $\angle ACD$ are not equal because AB \neq AC.



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