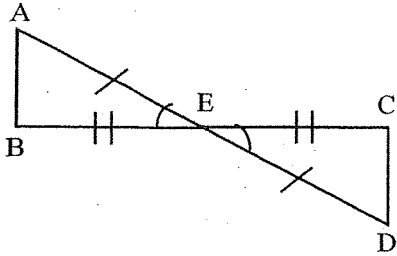


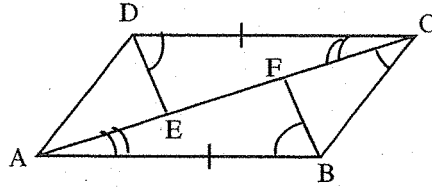
Triangle Congruence Worksheet #2

I. For each pair of triangles, tell which postulate, if any, can be used to prove the triangles congruent.

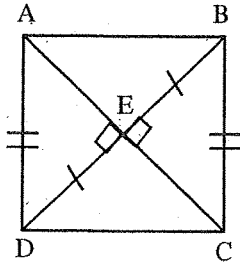
1. $\triangle AEB \cong \triangle DEC$ SAS



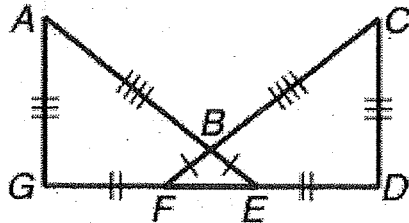
2. $\triangle CDE \cong \triangle ABF$ ASA



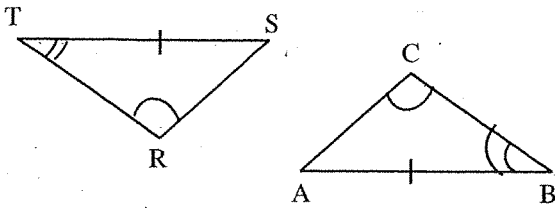
3. $\triangle DEA \cong \triangle BEC$ HL



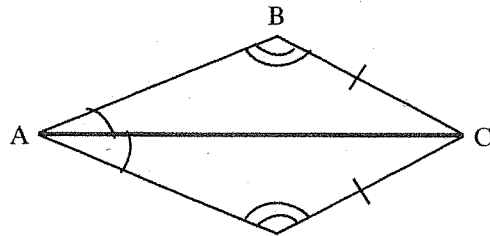
4. $\triangle AGE \cong \triangle CDF$ SSS



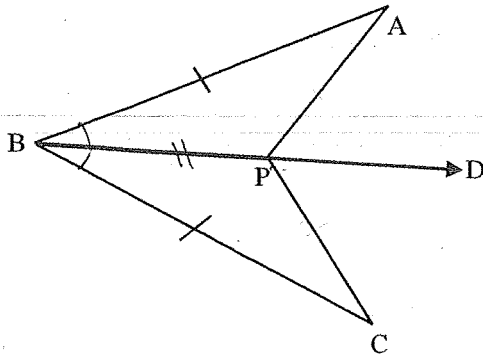
5. $\triangle RTS \cong \triangle CBA$ AAS



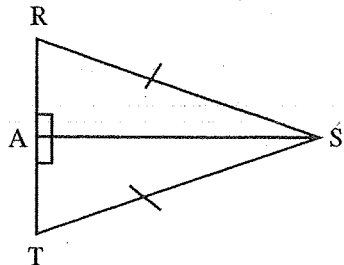
6. $\triangle ABC \cong \triangle ADC$ AAS



7. $\triangle BAP \cong \triangle BCP$
Given: \overrightarrow{BD} bisects $\angle ABC$ SAS



8. $\triangle SAT \cong \triangle SAR$ HL



II. For each pair of triangles, tell: (a) Are they congruent (b) Write the triangle congruency statement. (c) Give the postulate that makes them congruent.

1.
 a. Yes
 b. $\triangle BAE \cong \triangle ACE$
 c. ASA

2.
 a. Yes
 b. $\triangle ABE \cong \triangle CDE$
 c. SSS

3. Given: T is the midpoint of WR

 a. NO
 b. $\triangle AWT \cong \triangle CRT$
 c. SSA doesn't work

4.
 a. Yes
 b. $\triangle BFE \cong \triangle HEG$
 c. SAS

5. Given: IH Bisects $\angle WIS$

 a. Yes
 b. $\triangle WIH \cong \triangle SIH$
 c. ASA

6.
 a. Yes
 b. $\triangle AEG \cong \triangle LEU$
 c. ASA

7.
 a. Yes
 b. $\triangle RUT \cong \triangle STB$
 c. SSS

8.
 a. Yes
 b. $\triangle YUN \cong \triangle VYZ$
 c. ASA
 or AAS

9.
 a. NO
 b. $\triangle AAT \cong \triangle MTT$
 c. AAA not a thing

10. Given: I is the midpoint of ME and SL

 a. Yes
 b. $\triangle MIS \cong \triangle EIL$
 c. SAS

11.
 a. Yes
 b. $\triangle WYX \cong \triangle XYW$
 c. HL

12.
 a. NO
 b. $\triangle ABC \cong \triangle DEF$
 c. Not enough info

III. Using the given postulate, tell which parts of the pair of triangles should be shown congruent.

1. SAS

 $\overline{AE} \cong \overline{BD}$

2. ASA

 $\angle CAB \cong \angle FED$
 $\overline{LA} \cong \overline{LE}$

3. SSS

 $\overline{BA} \cong \overline{DA}$

4. AAS

 $\overline{PQ} \cong \overline{RS}$
 $\overline{PS} \cong \overline{RQ}$

5. HL

 $\overline{RP} \cong \overline{QR}$

6. ASA

 $\angle BAC \cong \angle PCA$