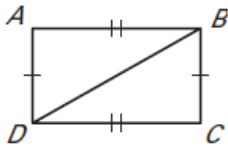
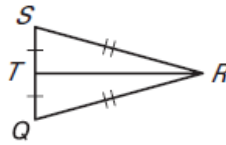


Decide whether the congruence statement is true. Explain your reasoning.

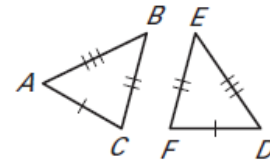
1. $\triangle ABD \cong \triangle CDB$



2. $\triangle RST \cong \triangle RQT$

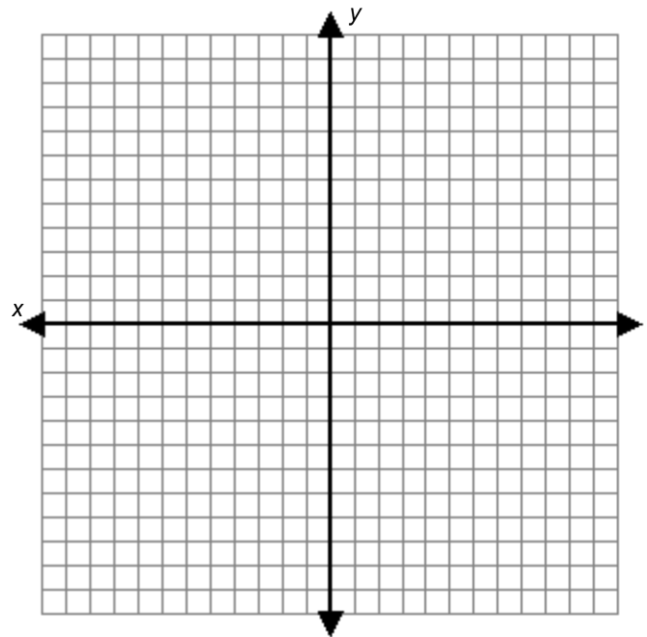


3. $\triangle ABC \cong \triangle DEF$

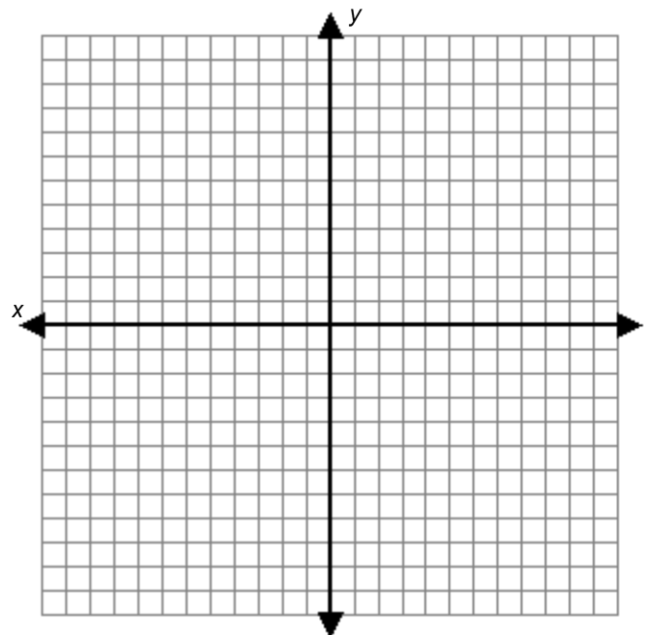


Use the distance formula and the given coordinates to determine if $\triangle ABC \cong \triangle DEF$.

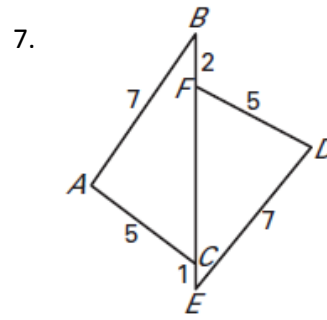
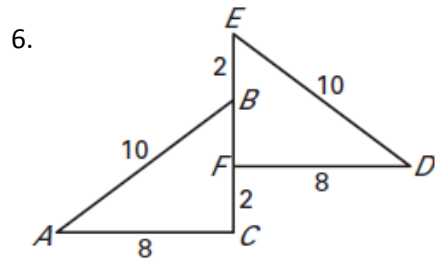
4. A(1, 2), B(4, -3), C(2, 5), D(4, 7), E(7, 2), F(5, 10)



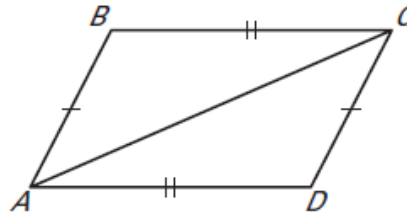
5. A(1, 1), B(4, 0), C(7, 5), D(4, -5), E(6, -6), F(9, -1)



Determine whether $\triangle ABC \cong \triangle DEF$. Explain your reasoning.

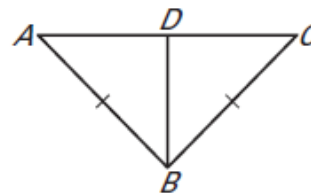


8. **Proof** Complete the proof.
GIVEN: $\overline{AB} \cong \overline{CD}$, $\overline{BC} \cong \overline{AD}$
PROVE: $\triangle ABC \cong \triangle CDA$



Statements	Reasons
1. $\overline{AB} \cong \overline{CD}$	1. ?
2. $\overline{BC} \cong \overline{AD}$	2. ?
3. $\overline{AC} \cong \overline{AC}$	3. ?
4. $\triangle ABC \cong \triangle CDA$	4. ?

9. **Proof** Complete the proof.
GIVEN: $\overline{AB} \cong \overline{CB}$, D is the midpoint of \overline{AC} .
PROVE: $\triangle ABD \cong \triangle CBD$



Statements	Reasons
1. $\overline{AB} \cong \overline{CB}$	1. ?
2. D is the midpoint of \overline{AC} .	2. ?
3. $\overline{AD} \cong \overline{CD}$	3. ?
4. $\overline{BD} \cong \overline{BD}$	4. ?
5. $\triangle ABD \cong \triangle CBD$	5. ?

Answers: 1) True; SSS 2) True; SSS 3) True; SSS 4) Congruent 5) Congruent 6) Yes; Corresponding sides are \cong 7) No; Corresponding sides are not \cong 8) Given, Given, Reflexive Prop, SSS 9) Given, Given, Def. of midpoint, Reflexive Prop, SSS