

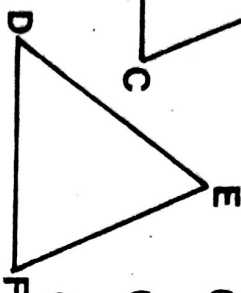
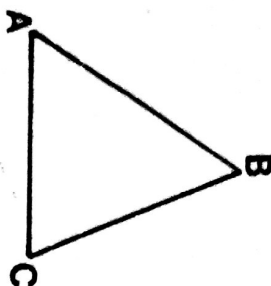
Puzzle 130 - Congruent Pairs

Name:

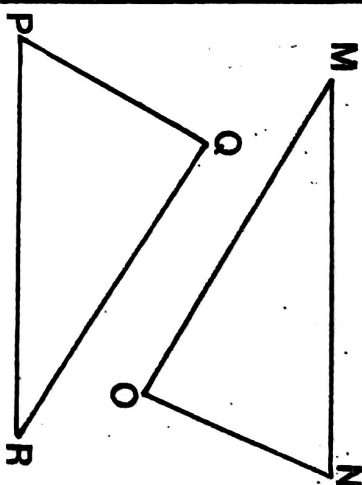
Assign #

Why Did Orgo Think His Pants Were Too Short?

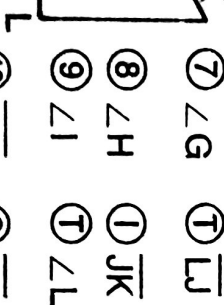
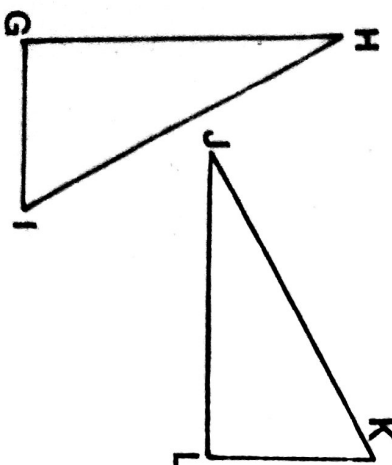
Next to each pair of congruent triangles below are listed all the angles and sides of the two triangles. Find a pair of CORRESPONDING PARTS. One of the corresponding parts will have a number, and the other will have a letter. Write the letter in the box at the bottom of the page that contains the number of the corresponding part.



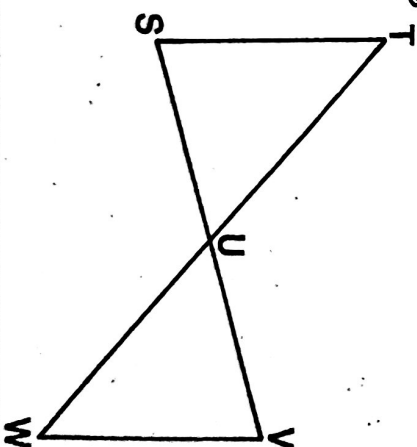
- ① $\angle A$ ⑩ $\overline{EF}$
 ② $\angle B$ ⑨ $\angle F$
 ③ $\angle C$ ⑤ $\angle D$
 ④ $\overline{AB}$ ⑧ $\overline{FD}$
 ⑤ $\overline{BC}$ ⑥ $\angle E$
 ⑥ $\overline{CA}$ ⑦ $\overline{DE}$



- ⑬ $\angle M$ ⑪ $\angle P$
 ⑭ $\angle N$ ⑫ $\overline{PQ}$
 ⑮ $\angle O$ ⑬ $\overline{RP}$
 ⑯ $\overline{MN}$ ⑭ $\angle R$
 ⑰ $\overline{NO}$ ⑮ $\overline{QR}$
 ⑱ $\overline{OM}$ ⑯ $\angle Q$



- ⑦ $\angle G$ ⑩ $\overline{LJ}$
 ⑧ $\angle H$ ⑪ $\overline{JK}$
 ⑨ $\angle I$ ⑫ $\angle L$
 ⑩ $\overline{GH}$ ⑬ $\overline{KL}$
 ⑪ $\overline{HI}$ ⑭ $\angle J$
 ⑫ $\overline{IG}$ ⑮ $\angle K$



- ⑰ $\angle S$ ⑱ $\overline{WU}$
 ⑲ $\angle T$ ⑲ $\angle V$
 ⑲ $\angle TUS$ ⑲ $\overline{VW}$
 ⑲ $\overline{ST}$ ⑲ $\angle W$
 ⑲ $\overline{TU}$ ⑲ $\angle VUW$
 ⑲ $\overline{US}$ ⑲ $\overline{UV}$

7	22	14	24	1	20	15	8	13	17	11	6	23	4	18	3	12	21	16	2	9	5	19	10
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Name: _____

ID: A

Short Answer

7. If $\triangle IJK \cong \triangle PQR$ then $\angle K \cong \angle$ _____?

8. If $\triangle FGH \cong \triangle LMN$ then $\angle G \cong \angle$ _____?

9. If $\triangle ABC \cong \triangle XYZ$ then $\angle A \cong \angle$ _____?

10. If $\triangle IJK \cong \triangle PQR$, fill in all 6 congruent parts.

Show work by drawing and marking triangles.

$\angle J \cong \angle$ _____ $\overline{IJ} \cong$ _____

$\angle I \cong \angle$ _____ $\overline{JK} \cong$ _____

$\angle K \cong \angle$ _____ $\overline{IK} \cong$ _____

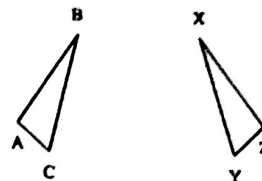
11. If $\triangle FGH \cong \triangle LMN$, fill in the blanks.

$\angle G \cong \angle$ _____ $\overline{FG} \cong$ _____

$\angle F \cong \angle$ _____ $\overline{GH} \cong$ _____

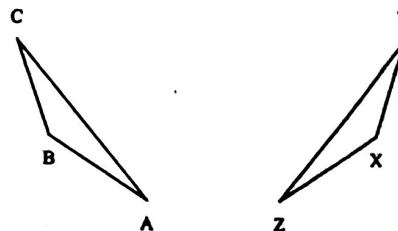
$\angle H \cong \angle$ _____ $\overline{FH} \cong$ _____

12. Which congruence property proves if $\angle C \cong \angle Y$, $\overline{CA} \cong \overline{YZ}$, and $\angle B \cong \angle X$.



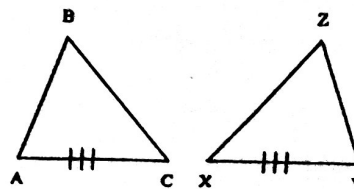
Which congruency property proves that $\triangle BCA \cong \triangle XYZ$?

13. Which congruence property proves if $\angle A \cong \angle Z$, $\overline{AB} \cong \overline{ZX}$, and $\angle B \cong \angle X$.



Which congruency property proves that $\triangle CAB \cong \triangle YZX$?

14. Given $\angle A \cong \angle Y$, $\angle C \cong \angle X$



Why are the triangles congruent?

$\triangle ABC \cong$ _____

Name: _____

Short Answer

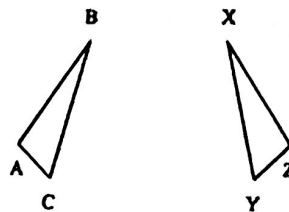
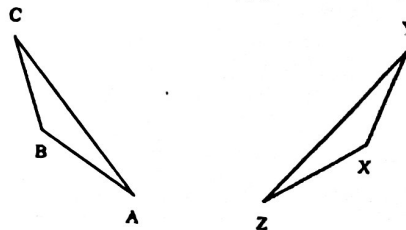
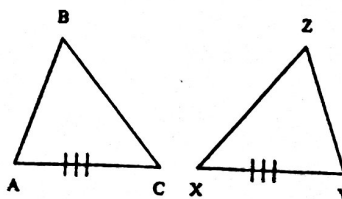
7. If $\triangle IJK \cong \triangle PQR$ then $\angle K \cong \angle$ _____?8. If $\triangle FGH \cong \triangle LMN$ then $\angle G \cong \angle$ _____?9. If $\triangle ABC \cong \triangle XYZ$ then $\angle A \cong \angle$ _____?10. If $\triangle IJK \cong \triangle PQR$, fill in all 6 congruent parts.

Show work by drawing and marking triangles.

$\angle J \cong \angle$ _____ $\overline{IJ} \cong$ _____
 $\angle I \cong \angle$ _____ $\overline{JK} \cong$ _____
 $\angle K \cong \angle$ _____ $\overline{IK} \cong$ _____

11. If $\triangle FGH \cong \triangle LMN$, fill in the blanks.

$\angle G \cong \angle$ _____ $\overline{FG} \cong$ _____
 $\angle F \cong \angle$ _____ $\overline{GH} \cong$ _____
 $\angle H \cong \angle$ _____ $\overline{FH} \cong$ _____

12. Which congruence property proves if $\angle C \cong \angle Y$, $\overline{CA} \cong \overline{YZ}$, and $\angle B \cong \angle X$.Which congruence property proves that $\triangle BCA \cong \triangle XYZ$?13. Which congruence property proves if $\angle A \cong \angle Z$, $\overline{AB} \cong \overline{ZX}$, and $\angle B \cong \angle X$.Which congruence property proves that $\triangle CAB \cong \triangle YZX$?14. Given $\angle A \cong \angle Y$, $\angle C \cong \angle X$ 

Why are the triangles congruent?

 $\triangle ABC \cong$ _____