

## Why Did Orgo Think His Pants Were Too Short?

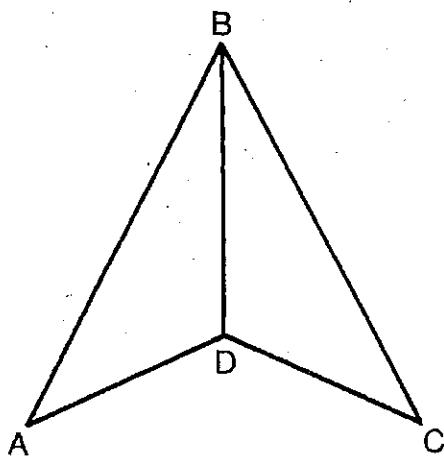
Next to each pair of congruent triangles below are listed all the angles and sides of the two triangles. Find a pair of CORRESPONDING PARTS. One of the corresponding parts will have a number, and the other will have a letter. Write the letter in the box at the bottom of the page that contains the number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

- Diagram Labels:**

  - ①  $\angle A$    ②  $\angle B$    ③  $\angle C$    ④  $\overline{AB}$    ⑤  $\overline{BC}$    ⑥  $\overline{CA}$    ⑦  $\angle G$    ⑧  $\angle H$    ⑨  $\angle I$    ⑩  $\overline{GH}$    ⑪  $\overline{HI}$    ⑫  $\overline{IG}$
  - ⑧  $\angle F$    ⑨  $\angle I$    ⑩  $\angle L$    ⑪  $\angle J$    ⑫  $\angle K$
  - ③  $\angle D$    ④  $\overline{FD}$    ⑤  $\angle E$    ⑥  $\overline{DE}$    ⑦  $\angle J$    ⑧  $\angle K$    ⑨  $\angle L$    ⑩  $\overline{KL}$
  - ①  $\angle N$    ②  $\angle O$    ③  $\angle P$    ④  $\overline{MN}$    ⑤  $\overline{NO}$    ⑥  $\overline{OM}$    ⑦  $\angle Q$
  - ⑧  $\angle R$    ⑨  $\angle S$    ⑩  $\angle T$    ⑪  $\angle U$    ⑫  $\angle V$    ⑬  $\angle W$    ⑭  $\angle X$    ⑮  $\angle Y$
  - ①  $\angle F$    ②  $\angle G$    ③  $\angle H$    ④  $\angle I$    ⑤  $\angle J$    ⑥  $\angle K$    ⑦  $\angle L$    ⑧  $\angle M$    ⑨  $\angle N$    ⑩  $\angle O$    ⑪  $\angle P$    ⑫  $\angle Q$
  - ①  $\angle R$    ②  $\angle S$    ③  $\angle T$    ④  $\angle U$    ⑤  $\angle V$    ⑥  $\angle W$    ⑦  $\angle X$    ⑧  $\angle Y$    ⑨  $\angle Z$

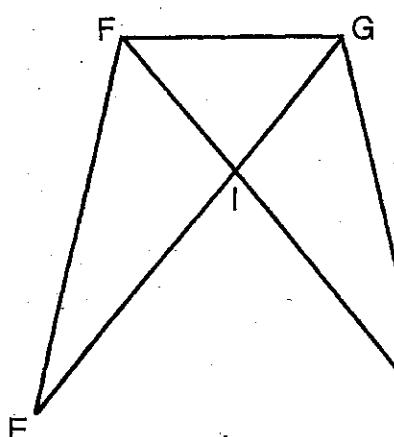
# Triangle Treat

All the sides and angles are listed for each triangle. Find a pair of CORRESPONDING PARTS. One 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.



$$\triangle ABD \cong \triangle CBD$$

- |                   |                     |
|-------------------|---------------------|
| ① $\angle A$      | (S) $\overline{BD}$ |
| ② $\angle ABD$    | (I) $\angle BCD$    |
| ③ $\angle BDA$    | (E) $\angle C$      |
| ④ $\overline{AB}$ | (A) $\overline{CD}$ |
| ⑤ $\overline{BD}$ | (E) $\overline{CB}$ |
| ⑥ $\overline{AD}$ | (O) $\angle CBD$    |

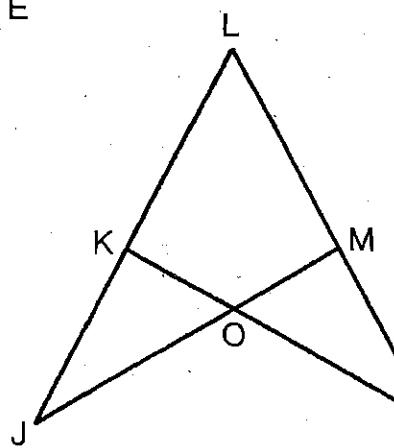


$$\triangle EFG \cong \triangle HGF$$

- |                   |                     |
|-------------------|---------------------|
| ⑦ $\angle E$      | (R) $\overline{FH}$ |
| ⑧ $\angle EFG$    | (O) $\angle H$      |
| ⑨ $\angle FGE$    | (E) $\angle HGF$    |
| ⑩ $\overline{EF}$ | (E) $\overline{FG}$ |
| ⑪ $\overline{FG}$ | (I) $\angle GFH$    |
| ⑫ $\overline{GE}$ | (S) $\overline{HG}$ |

$$\triangle EFI \cong \triangle HGI$$

- |                   |                     |
|-------------------|---------------------|
| ⑯ $\angle E$      | (S) $\angle HGI$    |
| ⑰ $\angle EFI$    | (C) $\overline{IH}$ |
| ⑱ $\angle FIE$    | (U) $\angle GIH$    |
| ⑲ $\overline{FE}$ | (E) $\overline{GH}$ |
| ⑳ $\overline{FI}$ | (E) $\angle H$      |
| ㉑ $\overline{IE}$ | (R) $\overline{GI}$ |



$$\triangle JLM \cong \triangle NLK$$

- |                   |                     |
|-------------------|---------------------|
| ㉒ $\angle J$      | (T) $\angle LKN$    |
| ㉓ $\angle L$      | (R) $\angle L$      |
| ㉔ $\angle LMJ$    | (T) $\overline{KN}$ |
| ㉕ $\overline{LJ}$ | (V) $\overline{LN}$ |
| ㉖ $\overline{LM}$ | (D) $\overline{LK}$ |
| ㉗ $\overline{MJ}$ | (E) $\angle N$      |

$$\triangleJKO \cong \triangleNMO$$

- |                   |                     |
|-------------------|---------------------|
| ㉘ $\angle J$      | (C) $\overline{ON}$ |
| ㉙ $\angleJKO$     | (P) $\overline{MO}$ |
| ㉚ $\angle KOJ$    | (S) $\angle NMO$    |
| ㉛ $\overline{KJ}$ | (N) $\angle MON$    |
| ㉜ $\overline{KO}$ | (T) $\angle N$      |
| ㉝ $\overline{OJ}$ | (T) $\overline{MN}$ |

5	25	7	17	8	23	13	28	1	18	24	3	22	11	14	6	20	16	30	2	15	27	21	4	12	26	29	9	19	10
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