EduSahara™ Worksheet

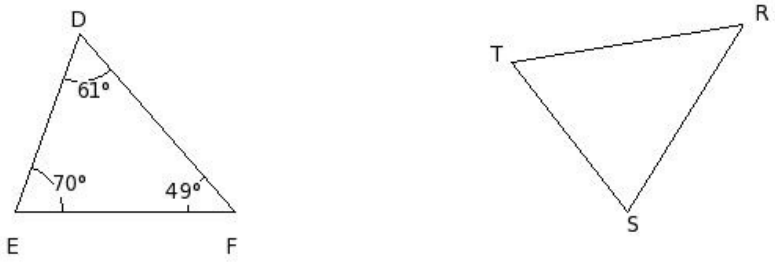
Name : Chapter Based Worksheet

Chapter : Congruence of Triangles

Grade : CBSE Grade VII

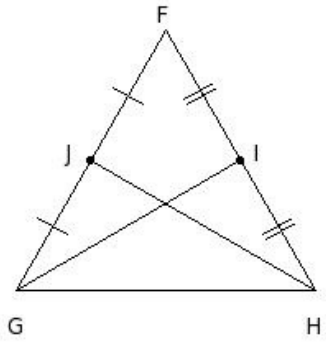
1. In the given figure, △DEF ≅ △TSR. Which of the following are true?

   a) ∠T = 70°
   b) ∠S = 70°
   c) ∠T = 61°
   d) ∠S = 49°
   e) ∠R = 49°
   f) ∠R = 61°



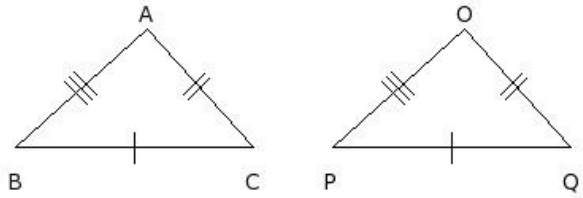
(i) {d,b,c} (ii) {f,a,e} (iii) {b,c,e} (iv) {d,c} (v) {a,b}

2. With the data in the figure, △GHJ ≅ △HGI by which property?



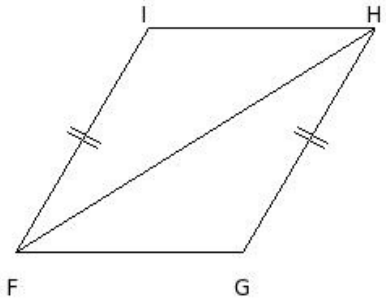
(i) RHS Congruency (ii) SSS Congruency (iii) ASA Congruency (iv) SAS Congruency (v) not congruent

3. Identify the property by which the two given triangles are congruent



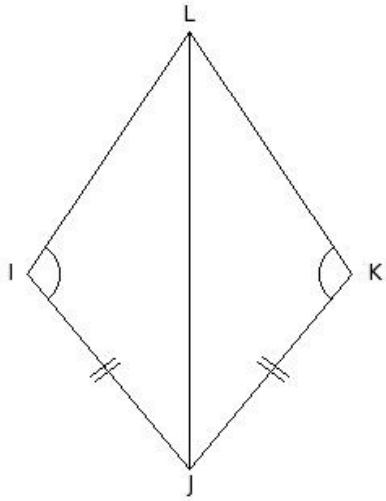
(i) ASA Congruency (ii) RHS Congruency (iii) SAS Congruency (iv) SSS Congruency

4. With the data in the figure, △FHI ≅ △HFG by which property?



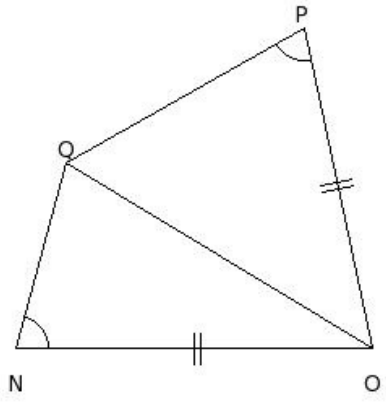
(i) not congruent (ii) SAS Congruency (iii) RHS Congruency (iv) SSS Congruency (v) ASA Congruency

5. With the data in the figure, △ILJ ≅ △KLJ by which property?



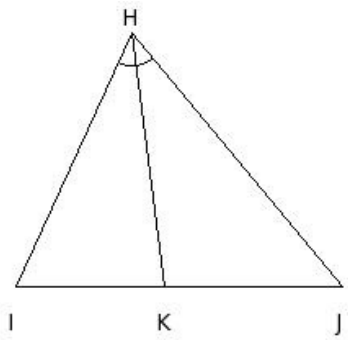
(i) ASA Congruency (ii) SSS Congruency (iii) RHS Congruency (iv) SAS Congruency (v) not congruent

6. With the data in the given figure, △NOQ ≅ △POQ by which property?



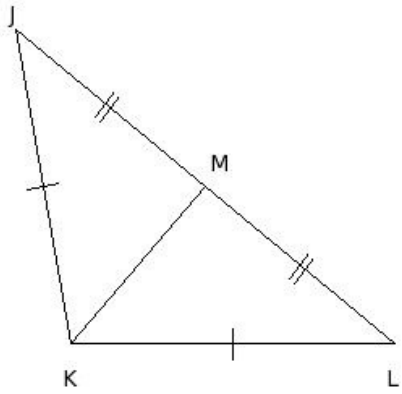
(i) SAS Congruency (ii) not congruent (iii) SSS Congruency (iv) ASA Congruency (v) RHS Congruency

7. With the data in the figure, △HKI ≅ △HKJ by which property?



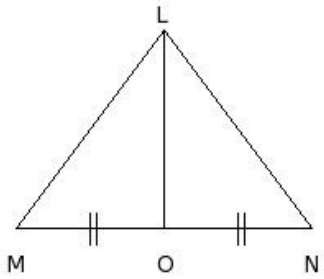
(i) SAS Congruency (ii) ASA Congruency (iii) not congruent (iv) RHS Congruency (v) SSS Congruency

8. In the given figure, △JKL is an obtuse angled triangle. △JKM ≅ △LKM by which property?



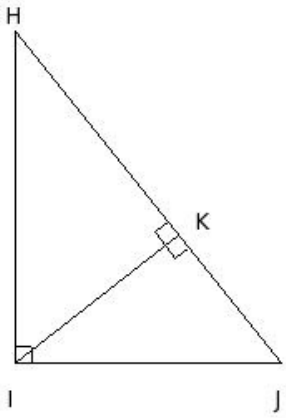
(i) RHS Congruency (ii) not congruent (iii) SSS Congruency (iv) ASA Congruency (v) SAS Congruency

9. With the data in the figure, △LOM ≅ △LON by which property?



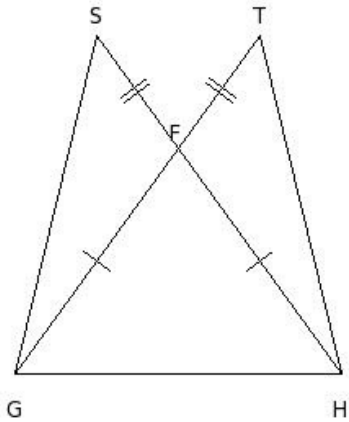
(i) ASA Congruency (ii) SAS Congruency (iii) not congruent (iv) RHS Congruency (v) SSS Congruency

10. With the data in the figure, △HKI ≅ △JKI by which property?



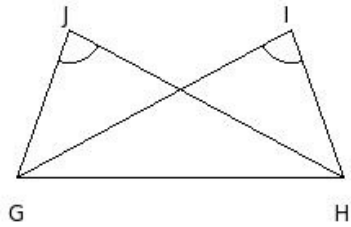
(i) SSS Congruency (ii) not congruent (iii) ASA Congruency (iv) SAS Congruency (v) RHS Congruency

11. With the data in the given figure, △SGH ≅ △THG by which property?



(i) ASA Congruency (ii) SSS Congruency (iii) not congruent (iv) SAS Congruency (v) RHS Congruency

12. With the data in the figure, △GHJ ≅ △HGI by which property?



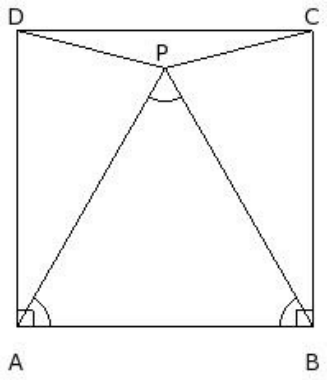
(i) RHS Congruency (ii) SSS Congruency (iii) ASA Congruency (iv) not congruent (v) SAS Congruency

13. Which of the following are true?

a) A square is a polygonal region.
b) A triangle is a polygonal region.
c) A sector is a polygonal region.
d) A semi-circle is a polygonal region.
e) A circle is a polygonal region.

(i) {e,c,a} (ii) {d,b} (iii) {d,b,a} (iv) {c,a} (v) {a,b}

14. In the given figure, ABCD is a square and △PAB is an equilateral triangle. △PDA ≅ △PCB by which property?



(i) RHS Congruency (ii) SAS Congruency (iii) not congruent (iv) ASA Congruency (v) SSS Congruency

15. In the given figure, which pair of triangles are not congruent ?

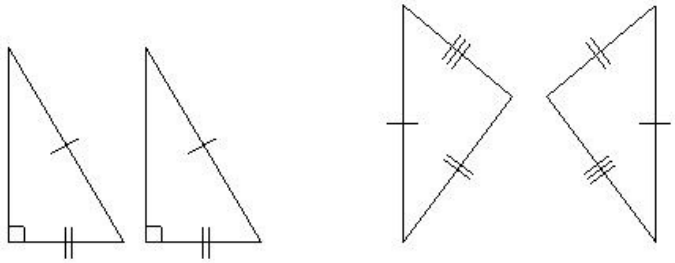


fig 3 fig 4

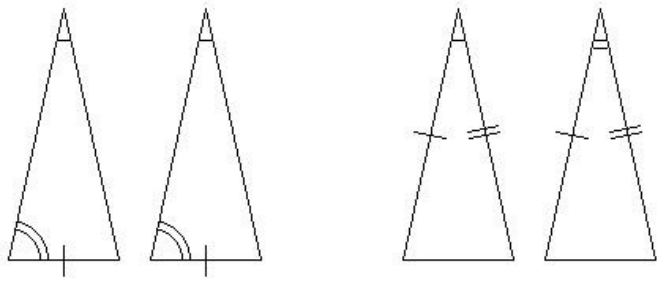
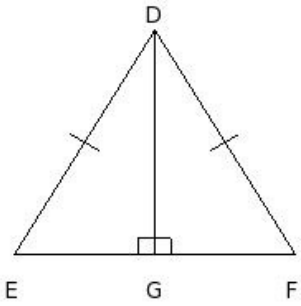


fig 1 fig 2

(i) fig 1 (ii) fig 2 (iii) fig 4 (iv) fig 3

16. With the data in the given figure, $\triangle DEG \cong \triangle DFG$ by which property?



(i) SSS Congruency (ii) not congruent (iii) SAS Congruency (iv) RHS Congruency (v) ASA Congruency

17. In the given figure, which pair of triangles are not congruent ?

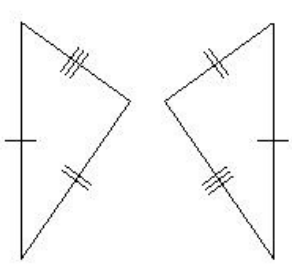


fig 3

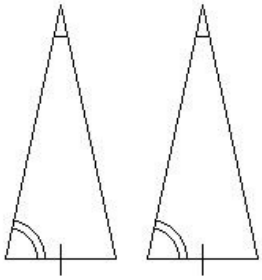


fig 4

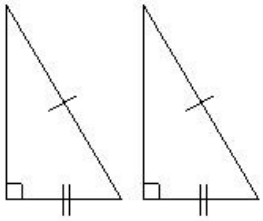


fig 1

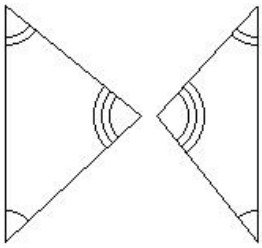


fig 2

(i) fig 4 (ii) fig 2 (iii) fig 1 (iv) fig 3

18. In the given figure, which pair of triangles are not congruent ?

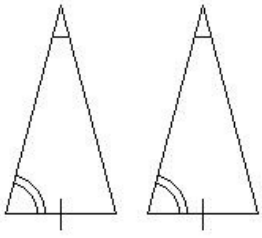


fig 3

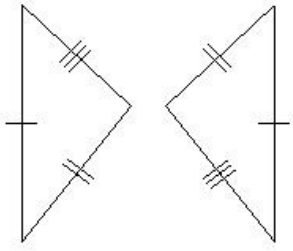


fig 4

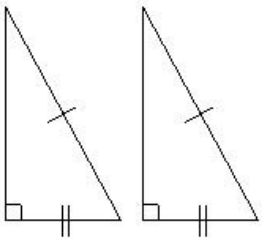


fig 1

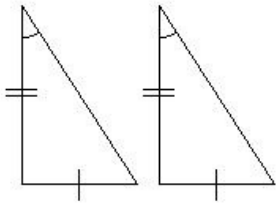
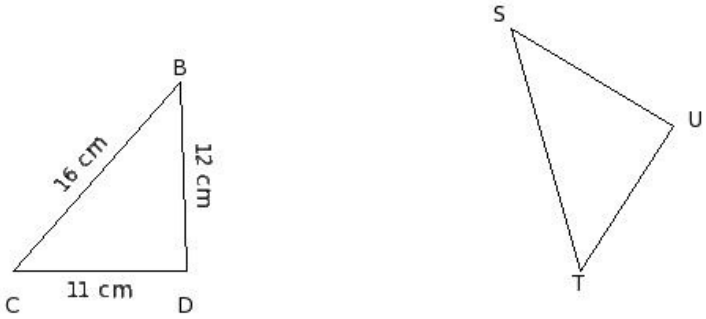


fig 2

(i) fig 4 (ii) fig 2 (iii) fig 1 (iv) fig 3

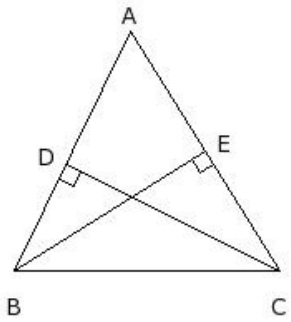
19. In the given figure, △BCD ≅ △STU. Which of the following are true?

a) US = 12 cm
b) TU = 11 cm
c) US = 16 cm
d) ST = 16 cm
e) ST = 11 cm
f) TU = 16 cm



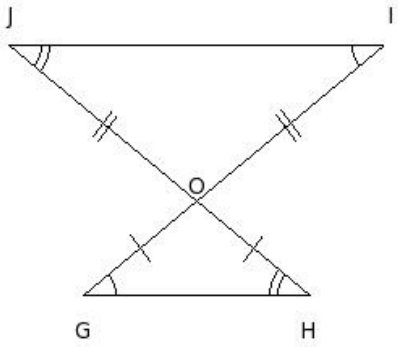
(i) {a,b,d} (ii) {f,c,d} (iii) {e,b} (iv) {e,a,b} (v) {c,a}

20. With the data in the figure, △BEC ≅ △CDB by which property?



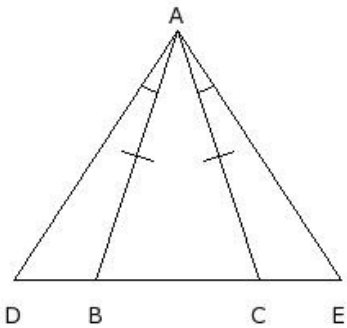
(i) SAS Congruency (ii) ASA Congruency (iii) not congruent (iv) SSS Congruency (v) RHS Congruency

21. With the data in the figure, △GOH ≅ △IOJ by which property?



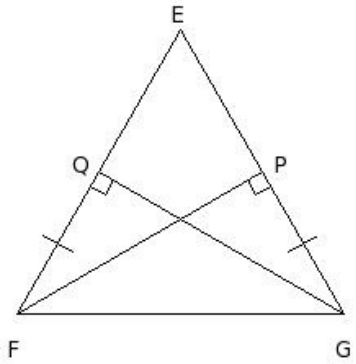
(i) ASA Congruency (ii) SSS Congruency (iii) not congruent (iv) SAS Congruency (v) RHS Congruency

22. With the data in the given figure, △ABD ≅ △ACE by which property?



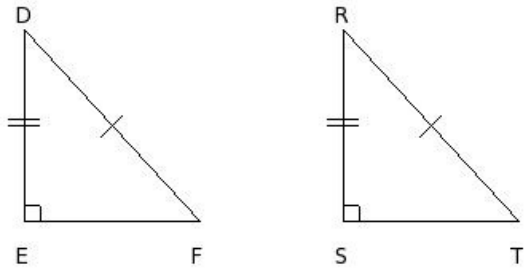
(i) not congruent (ii) SAS Congruency (iii) SSS Congruency (iv) ASA Congruency (v) RHS Congruency

23. With the given data in the figure, △QFG ≅ △PGF by which property?



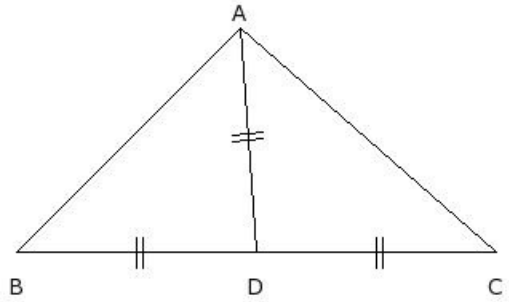
(i) RHS Congruency (ii) SAS Congruency (iii) not congruent (iv) ASA Congruency (v) SSS Congruency

24. Identify the property by which the two given triangles are congruent



(i) SAS Congruency (ii) ASA Congruency (iii) SSS Congruency (iv) RHS Congruency

25. With the data in the figure, △ADB ≅ △ADC by which property?



(i) SSS Congruency (ii) RHS Congruency (iii) ASA Congruency (iv) SAS Congruency (v) not congruent

Assignment Key

1) (iii)	2) (v)	3) (iv)	4) (i)	5) (v)	6) (ii)
7) (iii)	8) (iii)	9) (iii)	10) (ii)	11) (iv)	12) (iv)
13) (v)	14) (ii)	15) (ii)	16) (iv)	17) (ii)	18) (ii)
19) (i)	20) (iii)	21) (iii)	22) (iv)	23) (i)	24) (iv)
25) (v)					