

Name : Congruency of Triangles Chapter : Congruence of Triangles Grade : CBSE Grade VII License : Non Commercial Use

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



- (i) SSS Congruency (ii) ASA Congruency (iii) SAS Congruency (iv) RHS Congruency
- 2. Identify the property by which the two given triangles are congruent



- (i) RHS Congruency (ii) ASA Congruency (iii) SAS Congruency (iv) SSS Congruency
- 3. Identify the property by which the two given triangles are congruent



- (i) SAS Congruency (ii) RHS Congruency (iii) SSS Congruency (iv) ASA Congruency
- 4. Identify the property by which the two given triangles are congruent



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

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5. Which of the following are true?
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a) Any two circles are congruent.

b) Any two squares are similar.

c) Any two circles are similar.

d) Any two triangles are similar.

e) Any two triangles are congruent.

f) Any two squares are congruent.

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

6. Which of the following are true?

a) A sector is a polygonal region.

b) A triangle is a polygonal region.

c) A square is a polygonal region.

d) A circle is a polygonal region.

e) A semi-circle is a polygonal region.

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

7. Which of the following are true?

a) If two figures are congruent, then they are similar too.

b) If two figures are similar, then they are congruent too.

c) Congruent figures have same area.

d) Similar and congruent are not synonymous.

e) Similar figures have same area.

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

8. In the given figure, points F , G and H are the mid-points of sides DE, EC and CD of \triangle CDE. Which of the following are true?

a) $\triangle HDF \cong \triangle CHG$

b) $\triangle CHG \cong \triangle FGH$

c) $\triangle CHG \cong \triangle FHG$

d) $\triangle CHG \cong \triangle GFE$

e) $\triangle HDF \cong \triangle FGH$



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



f) ∠Q = 64°

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

13. In the given figure, which of the following is true?

(i) $\triangle LON \cong \triangle LMN$ (ii) $\triangle LNO \cong \triangle NLM$ (iii) $\triangle LNO \cong \triangle LMN$ (iv) $\triangle LNO \cong \triangle LNM$ (v) $\triangle LON \cong \triangle MNL$

14. With the data in the given figure, $\triangle KLN \cong \triangle KMN$ by which property?

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

15. With the data in the given figure, $\triangle OED \cong \triangle OCB$ by which property?

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

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

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

17. With the given data in the figure, $\triangle LMN \cong \triangle NOL$ by which property?

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

18. With the given data in the figure, $\triangle DEF \cong \triangle GFE$ by which property?

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

19. With the given data in the figure, $\triangle UCD \cong \triangle TDC$ by which property?

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

20. With the data in the given figure, $\triangle HKO \cong \triangle IJO$ by which property?

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

21. With the data in the given figure, $\triangle ADC \cong \triangle ABC$ by which property?

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

22. With the data in the given figure, $\triangle PKL \cong \triangle OLK$ by which property?

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

23. With the data in the given figure, $\triangle TIJ \cong \triangle UJI$ by which property?

24. In the given figure, \triangle ECD is an isosceles triangle. BF \perp CD passing through E. \triangle BEC $\cong \triangle$ BED by which property?

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

25. In the given figure, GHIJ is a square and \triangle QGH is an equilateral triangle. \triangle QJG $\cong \triangle$ QIH by which property?

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

26. With the data in the given figure, $\triangle JKM \cong \triangle JLN$ by which property?

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

27. With the data in the given figure, $\triangle CFD \cong \triangle CFE$ by which property?

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

28. With the data in the given figure, $\triangle GIH \cong \triangle HJG$ by which property?

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

29. With the data in the given figure, $\triangle JKN \cong \triangle JLM$ by which property?

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

30. In the given figure, $\triangle EFG$ is an obtuse angled triangle. $\triangle EFH \cong \triangle GFH$ by which property?

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

31. With the data in the given figure, $\triangle EOF \cong \triangle EOG$ by which property?

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

32. With the data in the figure, $\triangle ADB \cong \triangle CDB$ by which property?

33. With the data in the figure, $\triangle BEC \cong \triangle BED$ by which property?

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

34. With the data in the figure, $\triangle LOM \cong \triangle NOM$ by which property?

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

35. With the data in the figure, $\triangle LMO \cong \triangle LNO$ by which property?

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

36. With the data in the figure, $\triangle ORP \cong \triangle PQO$ by which property?

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

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

38. With the data in the figure, $\triangle BOC \cong \triangle EOD$ by which property?

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

39. With the data in the figure, $\triangle GHJ \cong \triangle HGI$ by which property?

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

40. With the data in the figure, $\triangle HJK \cong \triangle JHI$ by which property?

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

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

42. With the data in the figure, $\triangle ADB \cong \triangle BCA$ by which property?

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

43. With the data in the figure, $\triangle GOH \cong \triangle IOJ$ by which property?

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

44. With the data in the figure, $\triangle COD \cong \triangle EOF$ by which property?

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

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

46. With the data in the figure, $\triangle BCE \cong \triangle FDE$ by which property?

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

47. With the data in the figure, $\triangle JKM \cong \triangle LKM$ by which property?

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

48. With the data in the figure, $\triangle FGJ \cong \triangle GFK$ by which property?

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

49. With the data in the figure, \triangle HJK $\cong \triangle$ HJI by which property?

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

50. With the data in the figure, $\triangle FJI \cong \triangle GJH$ by which property?

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

51. With the data in the figure, $\triangle KLO \cong \triangle KMP$ by which property?

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

52. With the data in the given figure, $\triangle LMO \cong \triangle NMO$ by which property?

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

53. With the data in the given figure, $\triangle MNP \cong \triangle NMO$ by which property?

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

54. With the data in the given figure, $\triangle PQS \cong \triangle RSQ$ by which property?

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

55. With the data in the given figure, $\triangle PQS \cong \triangle RQS$ by which property?

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

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

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

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

Assignment Key					
1) (iii)	2) (ii)	3) (iii)	4) (i)	5) (i)	6) (iv)
7) (iii)	8) (iii)	9) (iv)	10) (iii)	11) (v)	12) (ii)
13) (ii)	14) (iii)	15) (iii)	16) (iv)	17) (iii)	18) (iv)
19) (iii)	20) (iv)	21) (ii)	22) (v)	23) (ii)	24) (ii)
25) (iii)	26) (iii)	27) (iv)	28) (iv)	29) (ii)	30) (iii)
31) (iii)	32) (i)	33) (ii)	34) (ii)	35) (i)	36) (ii)
37) (i)	38) (i)	39) (ii)	40) (i)	41) (ii)	42) (iv)
43) (iv)	44) (ii)	45) (iii)	46) (i)	47) (ii)	48) (ii)
49) (iv)	50) (i)	51)(v)	52) (i)	53) (i)	54) (ii)
55) (ii)	56) (iii)	57) (i)	58) (iv)		

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