

NCERT MATHS SOLUTIONS

Class - 7 || CONGRUENCE OF TRIANGLES

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Ques No.	Question
	NCERT - CLASS 7 - CHAPTER 7 CONGRUENCE OF TRIANGLES - EXERCISE 7.1 - Q 1
1	omplete the following statements: (a) Two line segments are congruent if. (b) Among two congruent angles, one has a measure of 70° ; the measure of the Other angle is. (c) When we write ? $A = B$, we actually mean.
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2	Give any two real-life examples for congruent shapes
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	NCERT - CLASS 7 - CHAPTER 7 CONGRUENCE OF TRIANGLES - EXERCISE 7.1 - Q 3
3	${ m If} \Delta ABC[\ _\ \cong\ ?\]$
	ΔFED under the correspondence $ABC \leftrightarrow FED$, write all the corresponding congruent parts of the triangles.
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	lf



$$AC = DFAB$$
 $= DEBC$ $= EFSo, \Delta ABC$ $\cong \Delta DFE$ (b) Given $ZX = RPRQ$ $= ZY? < PQR =$ $< XYZSo, \Delta PRQ$ $\cong ?|\Delta XYZ$ (c) Given?? $< MLN? =$ $< FCHML = FC$ So, (d) Given: $BB = DBAE$ $= BC? < A =$ $< C00° So,$ $\Delta ABE[- \cong ?]$ ΔCDB \odot Watch Free Video Solution on DoubtnutGet Answer just with a click! $I = Lakh Video$ $I = Lakh Vid$

NCERT - CLASS 7 - CHAPTER 7 CONGRUENCE OF TRIANGLES - EXERCISE 7.2 - Q 2

You want to show that

6	$\Delta ART[\equiv ~?]$ $\Delta PEN,$ (a) If you to use <i>SSS</i> criterion, then need to show (<i>i</i>)AR(<i>ii</i>)RT(<i>iii</i>)AT (<i>b</i>)Ifitisgivent_T=N and youare \rightarrow useSAS criterion, you \neq ed \rightarrow have(<i>i</i>) RT and (<i>ii</i>)PN(c)Ifitisgivent_AT=PN and youare \rightarrow useASA` criterion, you need to have (<i>i</i>)? (<i>ii</i>)? (b) Watch Free Video Solution on Doubtnut
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7	You have to show that . In the following proof, supply the missing reasons
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8	NCERT - CLASS 7 - CHAPTER 7 CONGRUENCE OF TRIANGLES - EXERCISE 7.2 - Q 4 In ΔABC , ? $A = 30^{\circ}$, ? $B = 40^{\circ}$ and ? C $= 110^{\circ}$ In ΔPQR , ? $P = 30^{\circ}$, ? $Q = 40^{\circ}$ and ? R $= 100^{\circ}$ A student says that $\Delta ABCE$ and ΔPQR by $\forall A$ Congruence criterion. Is he justified ? Why or why not ? • Watch Free Video Solution on Doubtnut
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	In the figure, the two triangles are congruent. The corresponding parts are marked. We





	NCERT - CLASS 7 - CHAPTER 7 CONGRUENCE OF TRIANGLES - SOLVED EXAMPLES - Q 1
14	$\Delta ABC \text{ and } \Delta PQR$ are congruent under the correspondence : $ABC \mapsto RQP$ write the parts of ΔABC that correspond to ? (i) $\angle P$ (ii) $\angle Q$ (iii) \overline{Rp}
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	NCERT - CLASS 7 - CHAPTER 7 CONGRUENCE OF TRIANGLES - SOLVED EXAMPLES - Q 2
	In triangles

15	ABC and PQR , AB = 3.5cm, BC = 7.1cm, AC = 5cm, PQ = 7.1cm, QR = 5cm and $PR= 3.5$. Examine whether the two triangles are congruent or not. If yes, write the congruence relation in symbolic form. () Watch Free Video Solution on Doubtnut
16	NCERT - CLASS 7 - CHAPTER 7 CONGRUENCE OF TRIANGLES - SOLVED EXAMPLES - Q3 In fig 7.13, AD = CD and $AB= CB$. (i) state the three pairs of equal in ΔABD and ΔCBD ; (ii) Is $\Delta ABD [\equiv -?]$ ΔCBD ? Why or why not ? (iii) Does BD bisect ? ABC ? Given reasons • Watch Free Video Solution on Doubtnut
17	NCERT - CLASS 7 - CHAPTER 7 CONGRUENCE OF TRIANGLES - SOLVED EXAMPLES - Q 4 Given below are measurements of some parts of two triangles. Examine whether the two triangles are congruent or not, by using SAS congruence rule. If the triangles are congruent, write them in symbolic form. ΔDEF • Watch Free Video Solution on Doubtnut
	 If the line segment joining one point A(a,b)andB(c,d) subtends an ae+bid angle 98at the origin.Prove that cos 0 = ae+bid ((a^{2+ap²})(c^{2+ap²}))(c^{2+ap²})(c^{2+ap²})(c^{2+ap²}))(c^{2+ap²})(c^{2+ap²}))(c^{2+ap²}))(c^{2+ap²}



	EXAMPLES - Q 5
18	In Fig 7.23, $AB = AC$ and AD is the bisector of ? BAC . (i) State three pairs of equal parts in triangles ADB and ADC . (ii) Is $\Delta ADB[\equiv \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
	ΔADC ? Given reasons. (iii) Is $igstarrow B=igstarrow C$? Given reasons
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	NCERT - CLASS 7 - CHAPTER 7 CONGRUENCE OF TRIANGLES - SOLVED EXAMPLES - Q 6
	By applying ASA congruence rule, it is to be established that $\Delta ABC[\ _\ \cong\ ?]$
19	ΔQRP and it is given that $BC=RP$. What additional information is needed to establish the congruence?
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	NCERT - CLASS 7 - CHAPTER 7 CONGRUENCE OF TRIANGLES - SOLVED EXAMPLES - Q 7
20	In Fig 7.26, can you use ASA congruence rule and conclude that $\Delta AOC[\equiv$ ~ ?] ΔBOD
	? Watch Free Video Solution on Doubtnut
	NCERT - CLASS 7 - CHAPTER 7 CONGRUENCE OF TRIANGLES - SOLVED EXAMPLES - Q 8
21	Given below are measurements of some parts of two triangles. Examine whether the two triangles are congruent or not, using RHS congruence rule. In case of congruent triangles, write the result in symbolic form
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EXAMPLES - Q 9

In Fig 7.31, $DA \perp AB, CB$ $\perp AB$ and AC= BD

. State the three pairs of equal parts in $\Delta ABC~~{\rm and}~~\Delta DAB.$ Which of the following statements is meaningful? (i) $\Delta ABC[~-\cong~?]$ $\Delta BAD~_{\rm (ii)}$

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