

APOLLO

Construction of Triangle

FBISE Mathematics Class 9 (SSC-I)

Domain B: Geometry

19 questions | questions

Original FBISE question crops. National Curriculum 2022-23 topic.

29	In a triangle, the three medians meet at a point called the:	Circumcenter	Orthocenter	Centroid	Incentre
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10	Draw a triangle ABC with $AB = 4$ cm, $BC = 5$ cm, and $CA = 6$ cm. Construct all three medians of the triangle. Verify that they are concurrent. Name the point of concurrency, and state whether it lies inside, on, or outside the triangle.	6
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Q.5	Construct a triangle $\triangle ABC$ of sides measure $m\overline{AB} = m\overline{BC} = m\overline{AC} = 5$ cm, $m\overline{AB} = m\overline{BC} = m\overline{AC} = 5$ cm, ایک مثلث $\triangle ABC$ بنائیں جس میں a Construct perpendicular bisectors of the triangle. مثلث کے عمودی ناصف b Write down the construction steps. کنسٹرکشن سٹیپس لکھیے	08	OR	The given table shows distribution of marks obtained by 50 students in a mathematics test: Calculate the median marks. <table border="1"> <tr> <th>C-I</th><th>01-10</th><th>11-20</th><th>21-30</th><th>31-40</th><th>41-50</th></tr> <tr> <td>f</td><td>5</td><td>10</td><td>15</td><td>12</td><td>8</td></tr> </table> درج جدول میں ریاضی کے ٹیسٹ میں 50 طلبہ کے حاصل کردہ نمبروں کی تفصیل ہے۔ اس مواد کا وسطانیہ معلوم کریں۔	C-I	01-10	11-20	21-30	31-40	41-50	f	5	10	15	12	8	08
C-I	01-10	11-20	21-30	31-40	41-50												
f	5	10	15	12	8												

Construct a triangle $\triangle ABC$ of sides measure $m\overline{AB} = m\overline{BC} = m\overline{AC} = 6$ cm $m\overline{AB} = m\overline{BC} = m\overline{AC} = 6$ cm ایک مثلث $\triangle ABC$ بنائیں جس میں a Construct perpendicular bisectors of the triangle. مثلث کے عمودی ناصف b Write down the construction steps. کنسٹرکشن سٹیپس لکھیے	08
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Q.4	Draw a triangle ABC in which $AB = 5.3$ cm, $BC = 6.5$ cm, and $AC = 8$ cm. Construct all three medians and show that they meet at one point. Label the centroid. ایک مثلث ABC بنائیں جس میں $AB = 5.3$ cm, $BC = 6.5$ cm اور $AC = 8$ cm ایک مثلث ABC بنائیں اور ثابت کریں کہ دو ایک ہی نقطہ پر ملتے ہیں۔ centroid کو لیبل کریں۔	08
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Construct triangle $\triangle ABC$, when $m\overline{AB} = 4.1$ cm, $m\overline{BC} = 3.8$ cm, $m\overline{CA} = 5.2$ cm

Construct angles of the following measures with the help of scale and compass: 45° , 120° .

Construct triangle $\triangle ABC$, when $m\overline{BC} = 4.3\text{cm}$, $m\overline{CA} = 3.6\text{cm}$, $\angle C = 75^\circ$

Q.3	Construct $\triangle ABC$ when $\overline{AB} = 5.8\text{cm}$, $\overline{BC} = 5\text{cm}$, $m\angle B = 45^\circ$. Draw its medians. Are these medians concurrent? Verify.	3+3 +1 +1	OR	Find the interior angles of triangle XYZ whose vertices are: $X(-3, 2)$, $Y(0, -1)$, $Z(3, 3)$	08
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The perpendicular bisectors of the sides of a triangle meet at the:	Incentre	Centroid	Orthocentre	Circumcentre
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Draw a triangle with lengths, 2cm, 3cm, 4cm. a. Draw perpendicular bisectors. b. Are these bisectors concurrent? Verify.	3+3 +2	OR	u. Normal The daily consumption of electricity units of 35 factory machines is recorded as in given table. Calculate mode of the data. <table><tr><td>C - I</td><td>20-24</td><td>25-29</td><td>30-34</td><td>35-39</td><td>40-44</td></tr></table>	C - I	20-24	25-29	30-34	35-39	40-44	08
C - I	20-24	25-29	30-34	35-39	40-44					

x.	Which of the following points is the intersection of the angle bisectors of a triangle?	circumcenter	orthocenter	incentre	centroid
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Q5	Construct altitudes of triangle ABC with side measures $m\overline{AB} = 4.8\text{cm}$, $m\overline{BC} = 3.5\text{cm}$, $m\overline{AC} = 4\text{cm}$ and show that the altitudes are concurrent. Write down the construction steps also.	8
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(v)	Prove that the bisectors of the angles of a triangle are concurrent.	04
	ثابت کریں کہ کسی مثلث کے گوشوں کے زاویوں کے نصفہم تقاطع ہوتے ہیں۔	

OR	Construct $\triangle DEF$ with $DE = 6\text{ cm}$, $\angle D = 60^\circ$, $\angle E = 60^\circ$. Draw all three altitudes and mark their intersection (orthocentre). مثلاً DEF بنائیں، جس میں، $DE = 6\text{ cm}$، $\angle D = 60^\circ$، $\angle E = 60^\circ$ ہو۔ مثلث کے تین عمود (ارتفاع) بنائیں اور ان کے تقاطع کے مقام (Orthocentre) کا تعین کریں۔	08
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First Annual 2026 | Section A Q12 | 1 mark

11. One side and two angles congruent.	(ض ض ض)	(ض ض ض)	(ض ض ض)	(ض ض ض)
12. Medians meet at:	Incenter	Orthocenter	Circumcenter	Centroid

First Annual 2026 | Section A Q13 | 1 mark

12. Medians meet at:	Incenter	Orthocenter	Circumcenter	Centroid
13. A perpendicular bisector cuts the line at:	At end point	0°	At one third	90°

First Annual 2026 | Section B Q2(iv) OR | 4 marks

Construct $\triangle ABC$. Draw bisectors of their angles. مثلاً $\triangle ABC$ بنائیں۔ اس کے زاویوں کے ناصف کھینچیں۔ $m\overline{AB} = 4.5\text{ cm}$, $m\overline{BC} = 3.1\text{ cm}$, $m\overline{CA} = 5.2\text{ cm}$	1+3
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First Annual 2026 | Section B Q2(vii) OR | 4 marks

Prove that the right bisectors of the sides of a triangle are concurrent. ثابت کریں کہ کسی مثلث کے اضلاع کے عمودی ناصف ہم نقطہ ہوتے ہیں۔	04
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