

BHARATIYA VIDYA BHAVA'S
VADODARA

Date:	Constructions	Subject: Mathematics
Class:IX	Name of the student:	

- 1) Construct an angle of 45° and bisect it.
- 2) Construct a square of side 5cm and bisect each angle.
- 3) Construct angle of 22.5° and give steps of construction.
- 4) Draw an angle of 40° and divide it into four equal parts.
- 5) Draw a line segment AB of length 7.5cm and find its axis of symmetry.
- 6) Construct a rhombus whose diagonals are 4cm and 6cm in lengths.
- 7) Draw an acute angled triangle ABC. Construct perpendicular bisectors of AB and BC intersecting each other at O. Measure OA, OB and OC. Are they equal?
- 8) Construct a ΔPQR in which, $PQ = 6\text{cm}$, $\angle QPR = 60^\circ$ and $QR+PR=13\text{ cm}$
- 9) Construct a right angled ΔABC in which $AB=5.6\text{cm}$, $BC=4.5\text{cm}$ and $\angle C=90^\circ$.
- 10) Construct a triangle ABC in which $BC=8\text{cm}$, $\angle B=45^\circ$ and $AB - AC=3.5\text{cm}$.
- 11) Construct a rectangle ABCD whose adjacent sides are 6.5cm and 8cm. Draw a perpendicular bisector for diagonal AC.
- 12) Construct an isosceles right angled triangle ABC with $AB=BC=6\text{cm}$ and $\angle B=90^\circ$. Find AC.
- 13) Construct a right angled triangle ABC which is right angled at B and hypotenuse $AC=5\text{cm}$ and $AB=4\text{cm}$.
- 14) Draw a triangle ABC in which $AB=5.2\text{cm}$, $BC=3.5\text{cm}$ and $\angle B=110^\circ$. Draw the angle bisector on $\angle B$.
- 15) Construct an equilateral triangle whose altitude measures 4.5cm.
- 16) Construct a parallelogram in which lengths of diagonals are 8.5cm and 7.0cm and angle between them is 60° .
- 17) Construct a triangle whose perimeter is 9cm and the base angles are 30° and 45° .
- 18) Construct a triangle XYZ in which $\angle Y=30^\circ$, $\angle Z=90^\circ$ and $XY+YZ+ZX=11\text{cm}$.
- 19) Construct a right angled triangle whose perimeter whose perimeter is equal to 10cm and one acute angle is 60° .