

VIII - Mathematics [Practical Geometry]

Academic Year 2011-2012

1. Construct a quadrilateral ABCD in which $AB = 4.4\text{cm}$, $BC = 4\text{cm}$, $CD = 6.4\text{cm}$, $DA = 2.8\text{cm}$ and $BD = 6.6\text{cm}$
2. Construct a parallelogram ABCD where $AB = 3.6\text{cm}$, $BC = 4.2\text{cm}$ and $AC = 6.5\text{cm}$.
3. Construct a rhombus with side 6cm and one diagonal 8cm . Measure the other diagonal.
4. Construct a quadrilateral ABCD in which $AB = 5.5\text{cm}$, $AD = 4.4\text{cm}$, $CD = 6.5\text{cm}$, $AC = 6.5\text{cm}$ and $BD = 7.1\text{cm}$.
5. Construct a rhombus COLD in which $CL = 7.5\text{cm}$ and $\overline{OD} = 6\text{cm}$
6. Construct a rectangle PURE in which $PU = 5.5\text{cm}$, $UR = 4\text{cm}$
7. Construct a parallelogram HARD in which $HA = 7\text{cm}$, $AR = 5\text{cm}$, $\angle D = 105^\circ$.
8. Construct a quadrilateral BIRD where $BI = 3.5\text{cm}$, $IR = 6.5\text{cm}$, $\angle B = 75^\circ$, $\angle I = 105^\circ$ and $\angle R = 120^\circ$
9. Construct a quadrilateral PQRS, in which $\angle Q = 45^\circ$, $\angle R = 90^\circ$, $QR = 5\text{cm}$, $PQ = 9\text{cm}$ and $RS = 7\text{cm}$.
10. Construct a kite SOLD if $OD = 8\text{cm}$, $SD = 5\text{cm}$ and $LD = 6\text{cm}$. Which properties of the kite did you use in the process.
11. How will you construct a rectangle PLOT if you know only the lengths PL and LO?
12. Construct a square GOAT with $GO = 4.9\text{cm}$
13. Construct a rhombus in which the diagonals are 6.6cm and 4.8cm long.