Question 1:
Construct the following quadrilaterals:
(i) Quadrilateral MORE
   MO = 6 cm, OR = 4.5 cm, $\angle M = 60^\circ$, $\angle O = 105^\circ$, $\angle R = 105^\circ$
(ii) Quadrilateral PLAN
    PL = 4 cm, LA = 6.5 cm, $\angle P = 90^\circ$, $\angle A = 110^\circ$, $\angle N = 85^\circ$
(iii) Parallelogram HEAR
     HE = 5 cm, EA = 6 cm, $\angle R = 85^\circ$
(iv) Rectangle OKAY
     OK = 7 cm, KA = 5 cm

Answer 1:
(i) **Given:** MO = 6 cm, OR = 4.5 cm, $\angle M = 60^\circ$, $\angle O = 105^\circ$, $\angle R = 105^\circ$
    **To construct:** A quadrilateral MORE.
    **Steps of construction:**
    (a) Draw a line segment MO = 6 cm.
    (b) Construct $\angle R = 105^\circ$ and taking radius 4.5 cm, draw an arc taking O as centre, which intersects at R.
    (c) Also construct an angle 105° at R and produce the side RE.
    (d) Construct another angle of 60° at point M and produce the side ME.
    Both sides ME and RE intersect at E.
    It is the required quadrilateral MORE.

(ii) **Given:** PL = 4 cm, LA = 6.5 cm, $\angle P = 90^\circ$, $\angle A = 110^\circ$, $\angle N = 85^\circ$
    **To construct:** A quadrilateral PLAN.
    **To find:** $\angle L = 360^\circ - (90^\circ + 85^\circ + 110^\circ) = 360^\circ - 285^\circ = 75^\circ$
    **Steps of construction:**
    (a) Draw a line segment PL = 4 cm.
    (b) Construct angle of 90° at P and produce the side PN.
    (c) Construct angle of 75° at L and with L as centre, draw an arc of radius 6 cm, which intersects at A.
    (d) Construct $\angle A = 110^\circ$ at A and produce the side AN which intersects PN at N.
    It is the required quadrilateral PLAN.
(iii) **Given:** HE = 5 cm, EA = 6 cm, ∠R = 85°  
**To construct:** A parallelogram HEAR.  
**To find:** ∠H = 180° − 85° = 95°  
[∴ Sum of adjacent angle of ||gm is 180°]  
**Steps of construction:**  
(a) Draw a line segment HE = 5 cm.  
(b) Construct ∠H = 95° and draw an arc of radius 6 cm with centre H. It intersects AR at R.  
(c) Join RH.  
(d) Draw ∠R = ∠E = 85° and draw an arc of radius 6 cm with E as a centre which intersects RA at A.  
(e) Join RA  
It is the required parallelogram HEAR.  

(iv) **Given:** OK = 7 cm, KA = 5 cm  
**To construct:** A rectangle OKAY.  
**Steps of construction:**  
(a) Draw a line segment OK = 7 cm.  
(b) Construct angle 90° at both points O and K and produce these sides.  
(c) Draw two arcs of radius 5 cm from points O and K respectively. These arcs intersect at Y and A.  
(d) Join YA.  
It is the required rectangle OKAY.