

Q.3

Observe diagram and write all

(i) Pair of corresponding angles

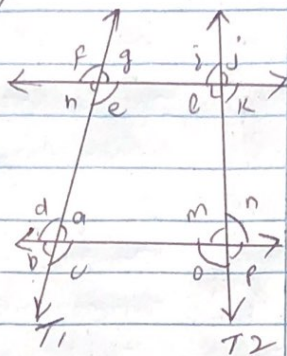
d and f, b and h, a and g, c and e,
m and i, l and o, n and j, k and p

(ii) Pair of alternate angles

d and e, a and h, m and k, n and l

(iii) Exterior angles

$\angle f, \angle g, \angle i, \angle j, \angle b, \angle c, \angle o, \angle p$



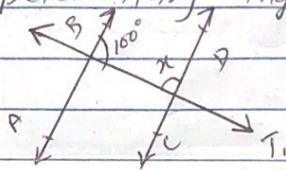
Q.4

Calculate unknown value

(i) $m\angle n + 100^\circ = 180^\circ$ supplementary angles

$$m\angle n = 180 - 100$$

$$m\angle n = 80^\circ$$



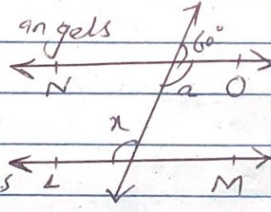
(ii) $m\angle a + 60^\circ = 180^\circ$ supplementary angles

$$m\angle a = 180 - 60$$

$$m\angle a = 120^\circ$$

$m\angle x = m\angle a$ Alternate angles

$$m\angle x = 120^\circ$$



(iii) $m\angle a = 111^\circ$ (Alternate angles)

$3x + m\angle a = 180^\circ$ (Supplementary angles)

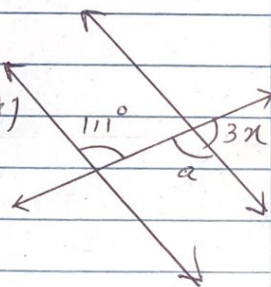
$$3x + 111 = 180$$

$$3x = 180 - 111$$

$$3x = 69^\circ$$

$$x = \frac{69}{3}$$

$$x = 23$$



(iv) $2x + 6x = 180^\circ$

interior angles of same side.

$$8x = 180$$

$$x = \frac{180}{8} \Rightarrow x = 22.5^\circ$$

