Understanding shapes-III special types of quadrilaterals Ex 17.1 Q3

Answer :

(i)No. This is because the opposite angles are not equal.

(ii)Yes. This is because the opposite sides are equal.

(ii)No, This is because the diagonals do not bisect each other.

Understanding shapes-III special types of quadrilaterals Ex 17.1 Q4

Answer :

$\angle HOP + 70^\circ = 180^\circ$ ($l$inear pair)

$\angle HOP = 180^\circ - 70^\circ = 110^\circ$

$x = \angle HOP = 110^\circ$ ($o$pposite angles of a parallelogram are equal)

$\angle EHP + \angle HEP = 180^\circ$ ($s$um of adjacent angles of a parallelogram is 180°)

$110^\circ + 40^\circ + z = 180^\circ$

$z = 180^\circ - 150^\circ = 30^\circ$

$y = 40^\circ$ (alternate angle$s$)

Understanding shapes-III special types of quadrilaterals Ex 17.1 Q5

Answer :

(i)

Opposite sides are equal in a parallelogram.

$\therefore\ 3y - 1 = 26$

$3y = 27$

$y = 9$

Similarly, $3x = 18$

$x = 6$

(ii)

Diagonals bisect each other in a parallelogram.

$\therefore\ y - 7 = 20$

$y = 27$

$x - y = 16$

$x - 27 = 16$

$x = 43$

********** END **********