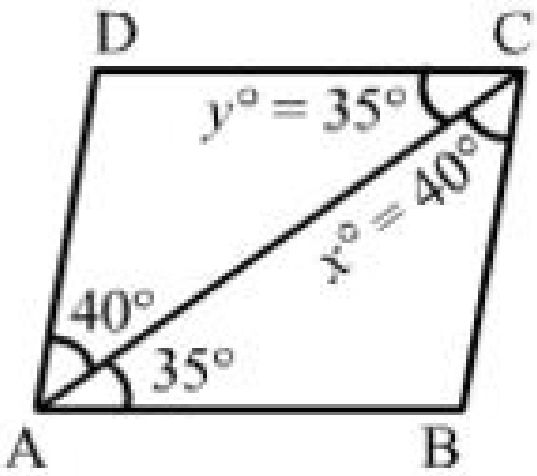
Exercise 14A

$\therefore \ x = 40$

$y = 35$



Q14

Answer :

Given :

$AB \parallel CD$

$\angle BAE = 125^\circ$

$\angle CAB + \angle BAE = 180^\circ$

or $125^\circ + x^\circ = 180^\circ$

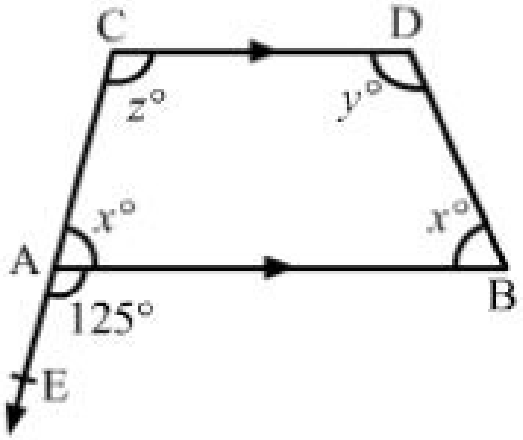
or $x = 55$

$x + z = 180^\circ$ (consecutive interior angles on the same side of transversal are supplementary)

$z = 180 - x = 180 - 55 = 125$

$y + x = 180^\circ$ (consecutive interior angles on the same side of transversal are supplementary)

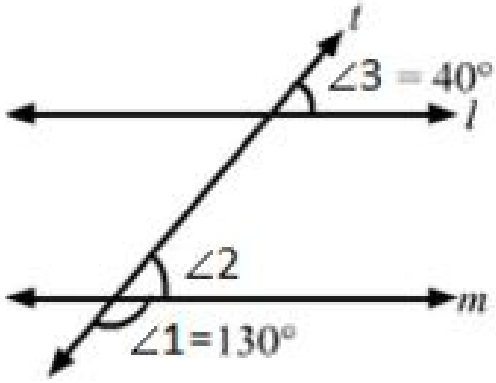
$y = 180 - x = 180 - 55 = 125$

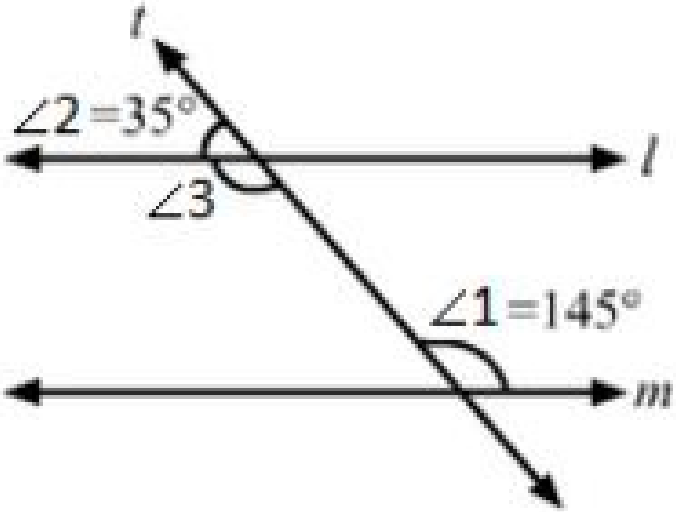


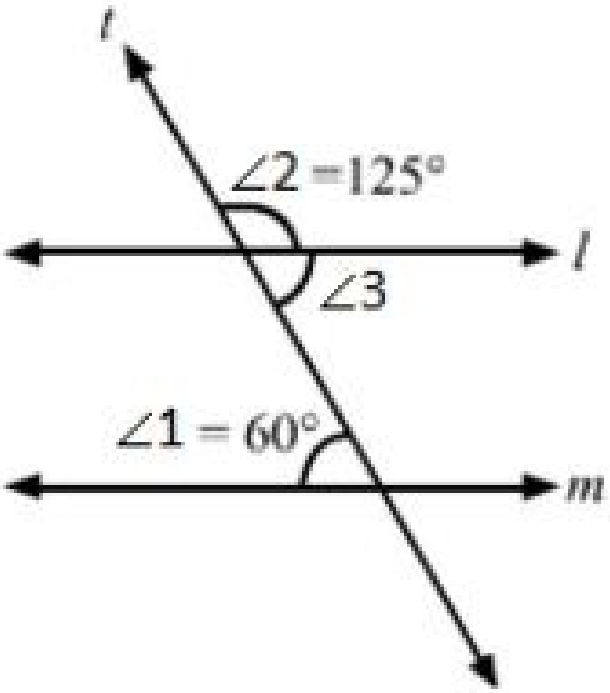
Q15

Answer :

(i) $\angle 1 + \angle 2 = 180$ (linear pair)
or $130^\circ + \angle 2 = 180^\circ$
or $\angle 2 = 50^\circ \neq 40^\circ = \angle 3$
$\therefore l \nparallel m$
(ii) $\angle 2 + \angle 3 = 180^\circ$ (linear pair)
$35^\circ + \angle 3 = 180^\circ$
$\angle 3 = 145^\circ = 145^\circ = \angle 1$
$\therefore l \parallel m$
(iii) $\angle 2 + \angle 3 = 180$ (linear pair)
$\angle 3 = 180^\circ - 125^\circ = 55^\circ$
$\angle 3 = 55^\circ \neq 60^\circ = \angle 1$
$\therefore l \nparallel m$







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