Sol^n: $x + 2x = 180°$ (Interior opposite Angle)

$\Rightarrow 3x = 180°$

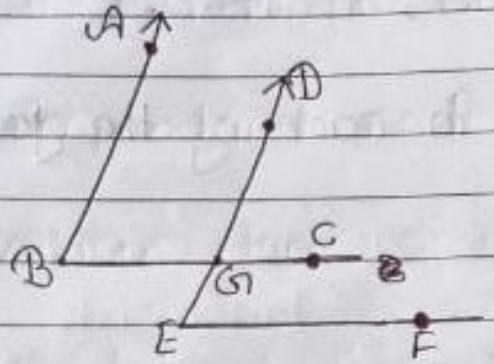
$\Rightarrow x = \frac{180°}{3}$

$\Rightarrow x = 60°$

(●) $x = 100°$ (Corresponding Angle.

5. In the given figure, the arms of two angles are parallel. If $\angle ABC = 70°$, then Find.

(i)



(i) $\angle DGC$

Sol^n: Given $AB \parallel DE$ and BC is transversal line and BC is $\angle ABC = 70°$.

$\because \angle ABC = \angle DGC$. (Corresponding Angle)

$\therefore \angle DGC = 70°$ ——— D

(ii) $\angle DEF$

Sol^n: Given, $BC \parallel EF$ and DE is transversal line and $\angle DGC = 70°$

$\therefore \angle DGC = \angle DEF$ (Corresponding Angle).

$\therefore \angle DEF = 70°$

Sol: Given P || Q and cut by a Transversal Line

$\because$ $125° + e = 180°$

$\therefore e = 180° - 125° = 55°$

$\therefore e = g = 55°$ (Vertically opposite Angles)

$a = g = 55°$ (Alternate Angle)

$a + b = 180°$ (Linear pair)

$55° + b = 180°$

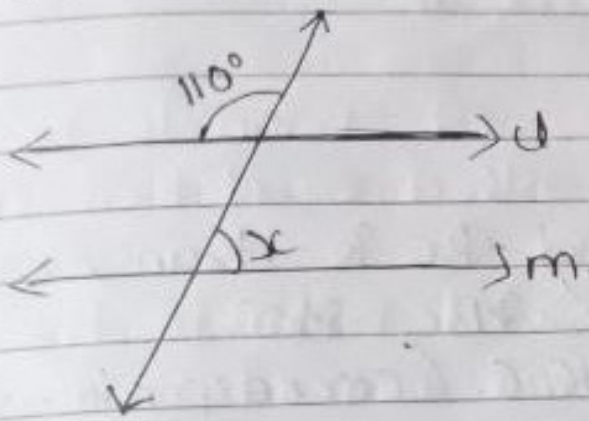
$b = 180° - 55° = 125°$

$a = c = 55°$ and $b = d = 125°$

$a = 55°, b = 125°, c = 55°, d = 125°, e = 55°, g = 55°$

4 Find the value of x in each of the following figure if $l \parallel m$

(i)



Sol: $110° + x = 180°$ (Supplementary Angle)

$x = 180° - 110°$

$x = 70°$

(ii)