Exercise 4A

Question 4:

(i) Complement of $58^\circ = 90^\circ - 58^\circ = 32^\circ$

(ii) Complement of $16^\circ = 90 - 16^\circ = 74^\circ$

(iii) $\frac{2}{3}$ of a right angle $= \frac{2}{3} \times 90^\circ = 60^\circ$

Complement of $60^\circ = 90^\circ - 60^\circ = 30^\circ$

(iv) $1^\circ = 60'$

$\Rightarrow 90^\circ = 89^\circ\ 60'$

	Deg	Min
	89°	$60'$
	~~90°~~	$0'$
$-$	46°	$30'$
	43°	$30'$

Complement of $46^\circ\ 30' = 90^\circ - 46^\circ\ 30' = 43^\circ\ 30'$

(v) $90^\circ = 89^\circ\ 59'\ 60''$

	Deg	Min	Sec
	89°	$59'$	$60''$
	~~90°~~	$0'$	$0''$
$-$	52°	$43'$	$20''$
	37°	$16'$	$40''$

Complement of $52^\circ\ 43'\ 20'' = 90^\circ - 52^\circ\ 43'\ 20''$

$= 37^\circ\ 16'\ 40''$

(vi) $90^\circ = 89^\circ\ 59'\ 60''$

	Deg	Min	Sec
	89°	$59'$	$60''$
	~~90°~~	$0'$	$0''$
$-$	68°	$35'$	$45''$
	21°	$24'$	$15''$

$\therefore$ Complement of $(68^\circ\ 35'\ 45'')$

$= 90^\circ - (68^\circ\ 35'\ 45'')$

$= 89^\circ\ 59'\ 60'' - (68^\circ\ 35'\ 45'')$

$= 21^\circ\ 24'\ 15''$

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