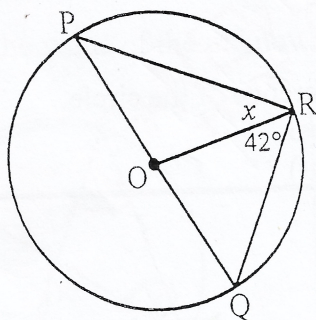


(b)

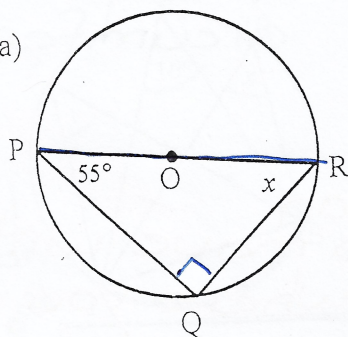


Statement	Reason
$\hat{R} = 90^\circ$	$\angle$ in a semi-circle
$\therefore x = 48^\circ$	$\text{ORQ} = 42^\circ$

EXERCISE 3

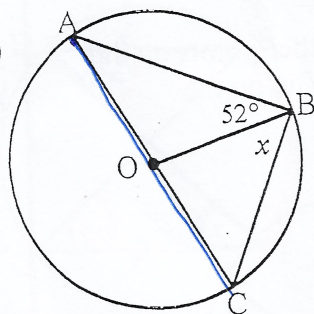
Calculate the value of the unknown variables. O is the centre.

(a)



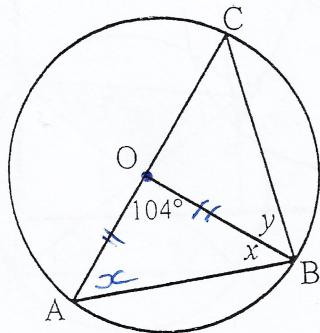
Statement	Reason
$\hat{Q} = 90^\circ$	(L's in semi $\odot$)
$x = 180 - 90 - 55$	(int. L's of Δ)
$x = 35^\circ$	

(b)



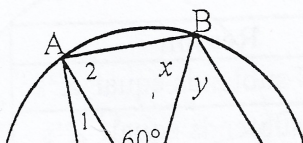
$\hat{B} = 90^\circ$	L's in semi $\odot$
$\therefore x + 52^\circ = 90^\circ$	
$x = 38^\circ$	

(c)



$OA = OB$	radius
$\hat{A} = \hat{B} = x$	L's opp. = sides
$\therefore x + x + 104^\circ = 180^\circ$	int L's of Δ
$2x = 76^\circ$	
$x = 38^\circ$	

(d)



Now $\hat{B} = 90^\circ$	L's in semi $\odot$
$38^\circ + y = 90^\circ$	
$y = 52^\circ$	