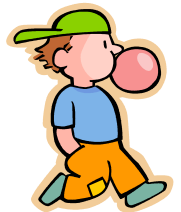






# Tick or Trash—Circle Theorems



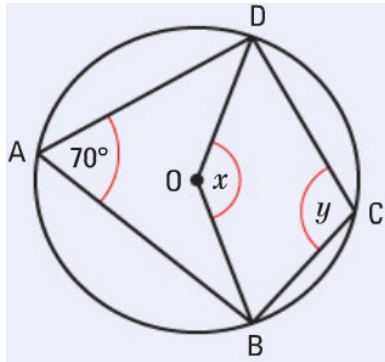
Nikki

Gavin

Angle  $x$  is equal to  $140^\circ$



Angle at centre double angle at circumference

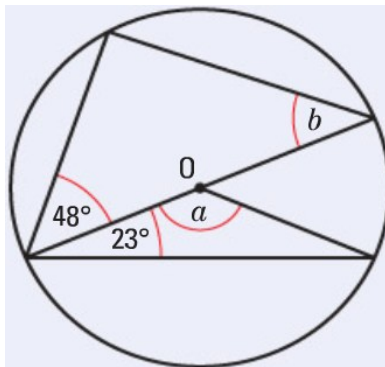


Angle  $y$  is equal to  $140^\circ$

Angle  $y$  is  $110^\circ$ , as it is opposite angle in cyclic quadrilateral

Angle  $b$  is equal to  $52^\circ$

Angle  $b$  is  $42^\circ$ , as it is in a right angled triangle (diameter)



Angle  $a$  is equal to  $134^\circ$

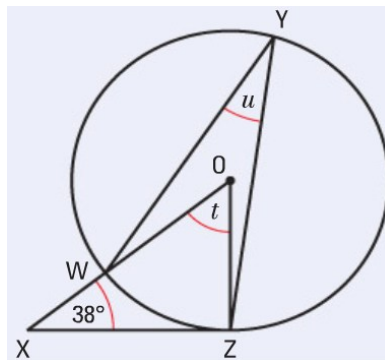


Isosceles triangle

Angle  $u$  is equal to  $26^\circ$



Angle at centre double angle at circumference, and  $XZO$  is  $90^\circ$

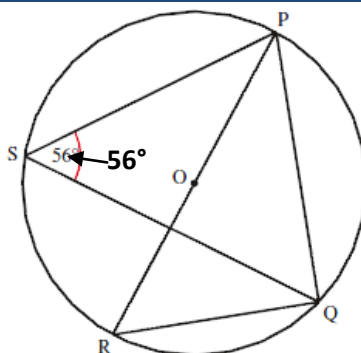


Angle  $u$  is equal to  $52^\circ$

Angle  $t$  is  $52^\circ$ , as  $ZO$  is a radius and so  $XZO$  is  $90^\circ$

Angle  $PQR$  is equal to  $124^\circ$

Angle  $PQR$  is  $90^\circ$ , as  $PR$  is a diameter



Angle  $RPQ$  is equal to  $34^\circ$

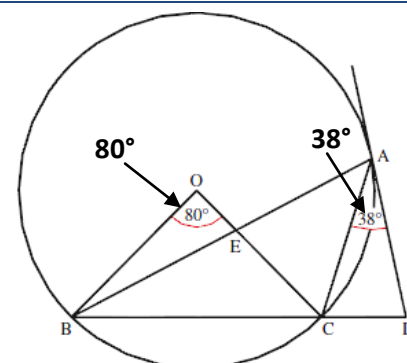


$PRQ = 56^\circ$  (same segment)  
 $PQR = 90^\circ$  (semicircle)

Angle  $BAC$  is equal to  $40^\circ$



Angle at centre double angle at circumference



Angle  $OCB$  is equal to  $40^\circ$

Angle  $OCB$  is  $50^\circ$ , as triangle  $OCB$  is isosceles