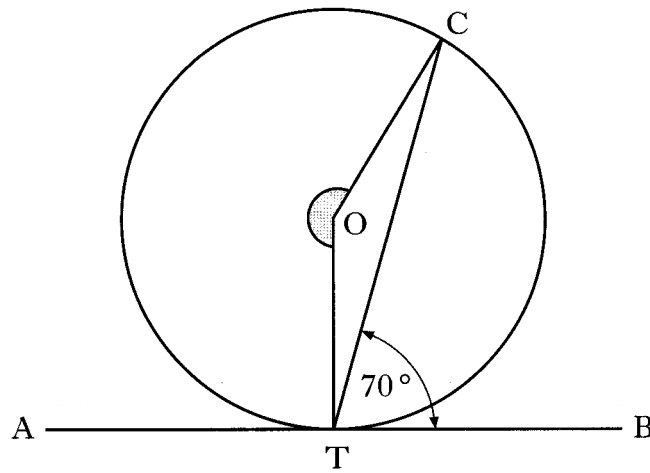


2008 P1 Q9



In the diagram above:

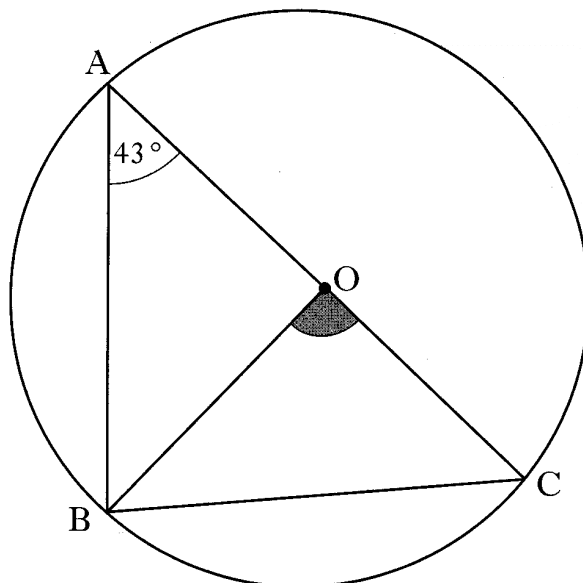
- O is the centre of the circle
- AB is a tangent to the circle at T
- angle BTC = 70° .

Calculate the size of the shaded angle TOC.

3

Ans 140°

2007 P2 Q9



In the diagram:

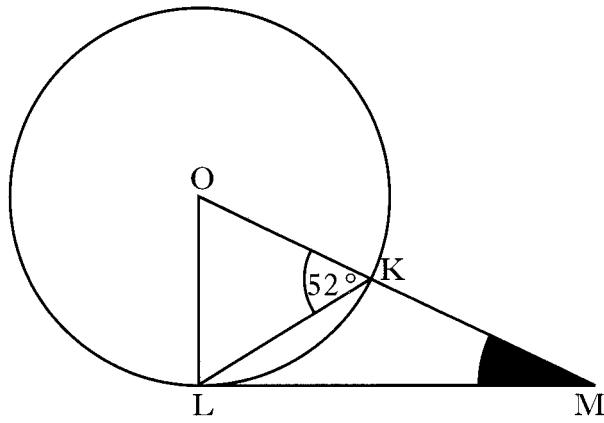
- O is the centre of the circle
- AC is a diameter
- B is a point on the circumference
- angle BAC = 43° .

Calculate the size of shaded angle BOC.

3

Ans 86°

2006 P1 Q9



In the diagram above with circle centre O:

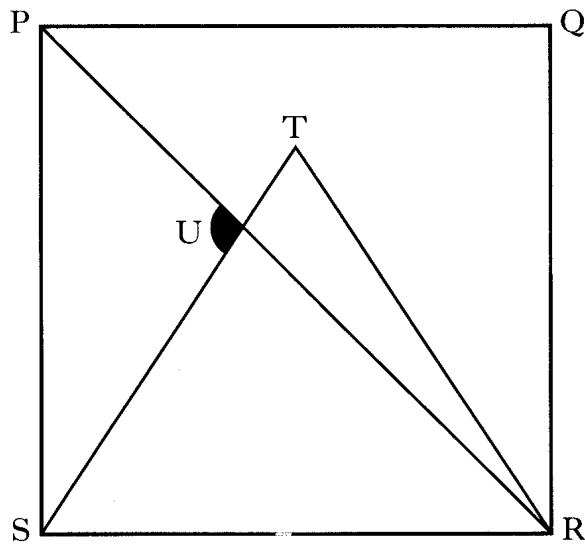
- LM is a tangent to the circle at L
- OM intersects the circle at K
- Angle OKL = 52° .

Calculate the size of the shaded angle OML.

3

Ans 14°

2005 P1 Q9



In the diagram above

- PQRS is a square
- PR is a diagonal of the square
- Triangle RST is equilateral.

Calculate the size of the shaded angle SUP.

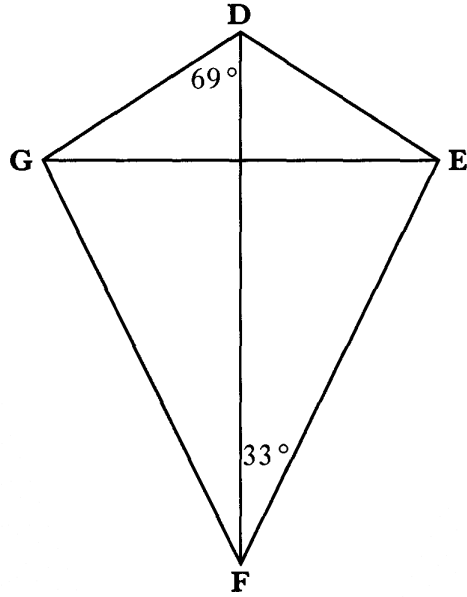
3

Ans 105°

DEFG is a kite.

- Angle $GDF = 69^\circ$
- Angle $EFD = 33^\circ$

Calculate the size of angle DGF.



3

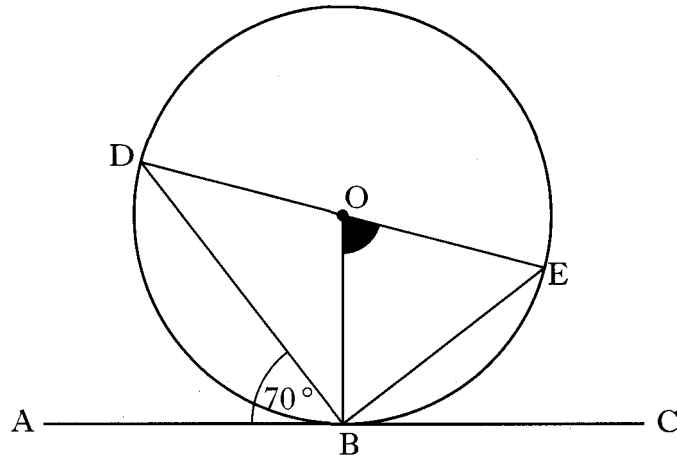
2004 P1 Q7

Ans 78°

In the diagram above

- a circle, centre O, is drawn,
- the line AC is a tangent to the circle at B,
- Angle $DBA = 70^\circ$.

Calculate the size of the shaded angle BOE.

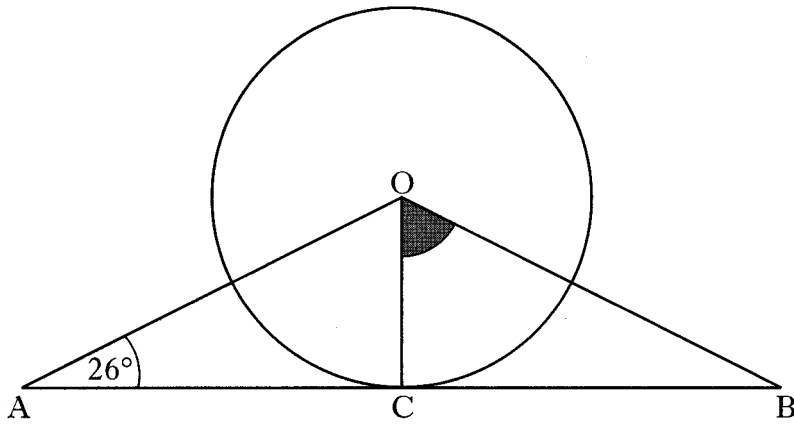


3

2003 P1 Q10

Ans 40°

2002 P1 Q7



In the above diagram with circle centre O,

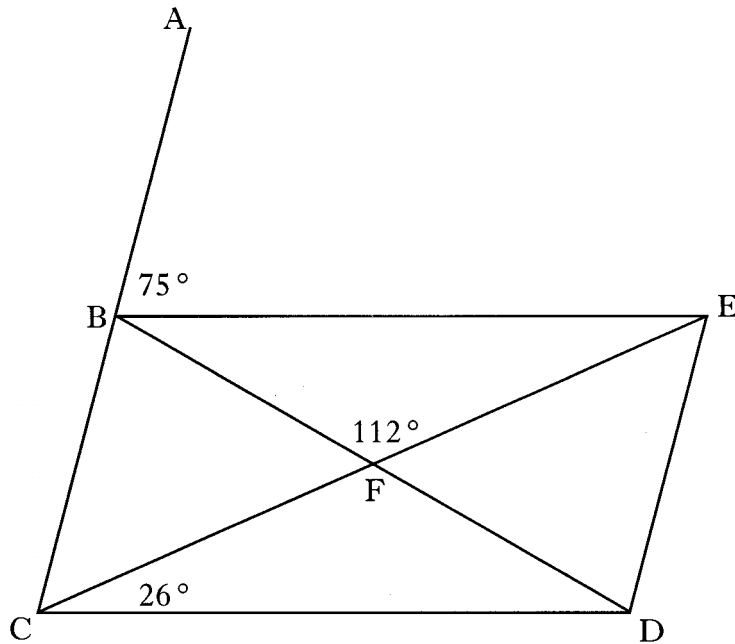
- Triangle AOB is isosceles
- AB is a tangent to the circle at C
- Angle CAO is 26° .

Calculate the size of the shaded angle COB.

2

Ans 64°

2001 P1 Q8



BCDE is a parallelogram.

Angle ABE = 75° , angle ECD = 26° , angle BFE = 112° .

Calculate the size of the angle CBD.

3

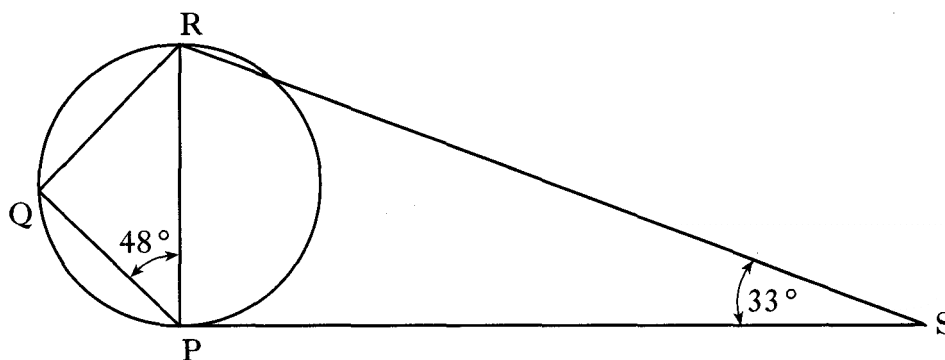
Ans 63°

2000 P1 Q10

In the diagram below PR is a diameter of the circle.

PS is a tangent to the circle at P.

Angle QPR = 48° and angle PSR = 33° .



(a) Write down the size of angle PQR. Give a reason for your answer.

(b) **Calculate** the size of angle QRS.

1

3

Ans (a) 90° (angle in a semicircle) (b) 99°