CIRCLES, CHORDS & TANGENTS

KCSE QUICK REVISION

Compilation of Possible Questions in Mathematics Likely to be examined in KCSE.

A Special Analysis of Prediction Questions that may be Tested in KCSE from this Topic in Form 3.

MATHEMATICS

SERIES 1

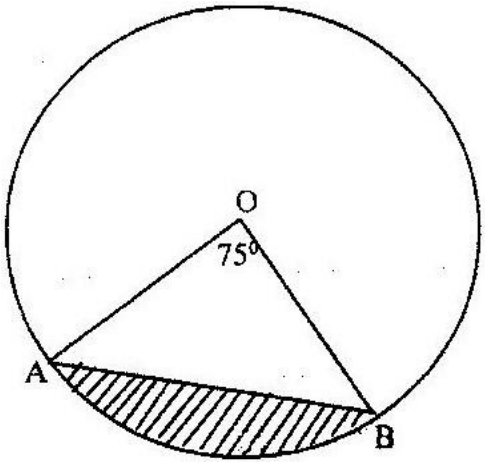
For Marking Schemes

Mr Isaboke 0746 222 000 / 0742 999 000

MWALIMU CONSULTANCY

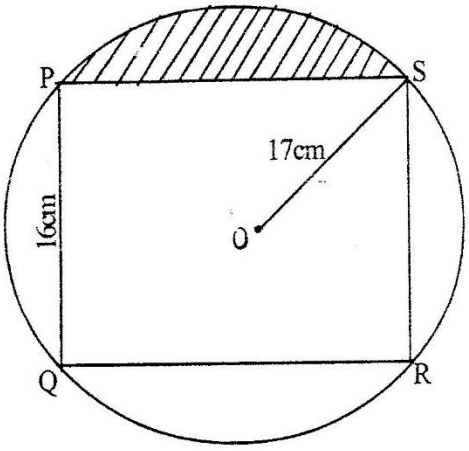
CIRCLES, CHORDS AND TANGENTS

1. The figure below represents a circle a diameter 28 cm with a sector subtending an angle of 75^0 at the centre.



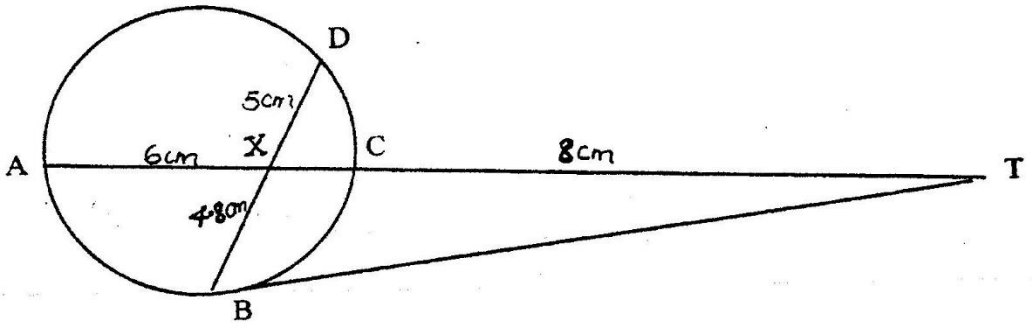
Find the area of the shaded segment to 4 significant figures
(a) <PST

2. The figure below represents a rectangle PQRS inscribed in a circle centre 0 and radius 17 cm. PQ = 16 cm.



Calculate
(a) The length PS of the rectangle
(b) The angle POS
(c) The area of the shaded region

3. In the figure below, BT is a tangent to the circle at B. AXCT and BXD are straight lines. AX = 6 cm, CT = 8 cm, BX = 4.8 cm and XD = 5 cm.

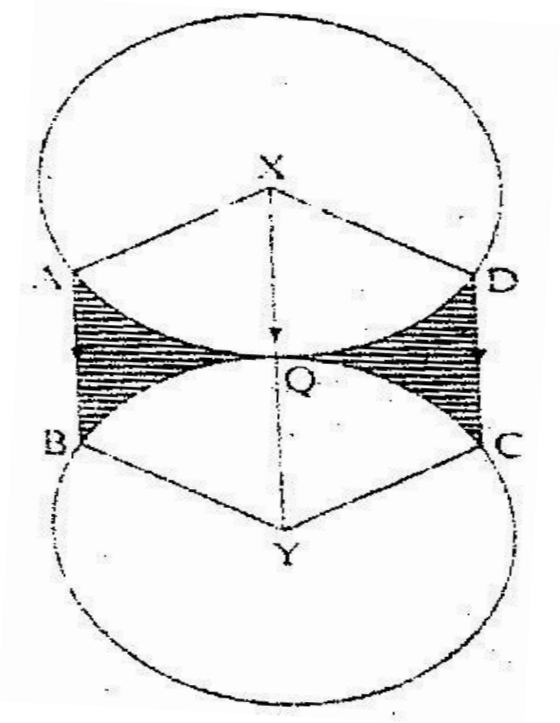


Find the length of

(a) XC

(b) BT

4. The figure below shows two circles each of radius 7 cm, with centers at X and Y. The circles touch each other at point Q.



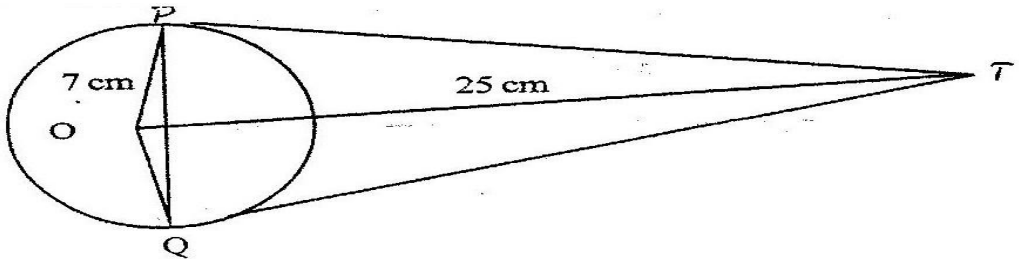
Given that <AXD = <BYC = 120^0 and lines AB, XQY and DC are parallel, calculate the area of:

a) Minor sector XAQD (Take $\pi\ ^{22}/_{7}$)

b) The trapezium XABY

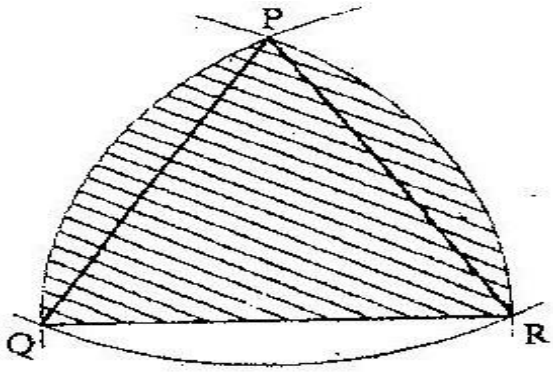
c) The shaded regions.

5. The figure below shows a circle, centre, O of radius 7 cm. TP and TQ are tangents to the circle at points P and Q respectively. OT =25 cm.



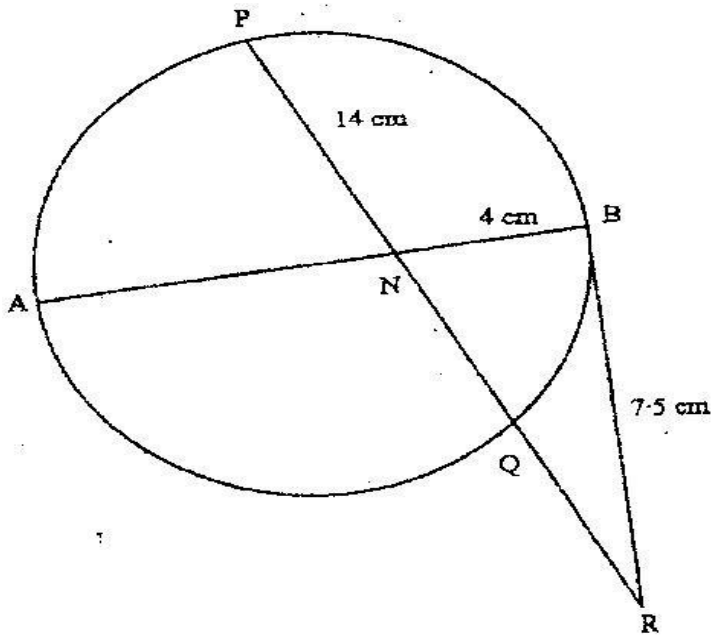
Calculate the length of the chord PQ

6. In the figure below, PQR is an equilateral triangle of side 6 cm. Arcs QR, PR and PQ arcs of circles with centers at P, Q and R respectively.



Calculate the area of the shaded region to 4 significant figures

7. In the figure below AB is a diameter of the circle. Chord PQ intersects AB at N. A tangent to the circle at B meets PQ produced at R.



Given that PN = 14 cm, NB = 4 cm and BR = 7.5 cm, calculate the length of:

(a) NR

(b) AN

For Marking Schemes/Answers

Contact Mr Isaboke

0746-222-000

OR

0742-999-000

FOR THE FOLLOWING;

- ✓ONLINE TUITION
- ✓REVISION NOTES
- ✓SCHEMES OF WORK
- ✓SETBOOKS VIDEOS
- ✓TERMLY EXAMS
- ✓QUICK REVISION KITS
- ✓KCSE TOPICALS
- ✓KCSE PREMOCKS
- ✓TOP SCHOOLS PREMOCKS
- ✓JOINT PREMOCKS
- ✓KCSE MOCKS
- ✓TOP SCHOOLS MOCKS
- ✓JOINT MOCKS
- ✓KCSE POSTMOCKS
- ✓TOP SCHOOLS PREDICTIONS
- ✓KCSE PREDICTIONS
- ✓KCSE REVEALED SETS

CALL/TEXT/WHATSAPP

0746 222 000 / 0742 999 000

mwalimuconsultancy@gmail.com

This is a Copyright Property of Mwalimu Consultancy Ltd.

POWERED
BY
MR ISABOKE