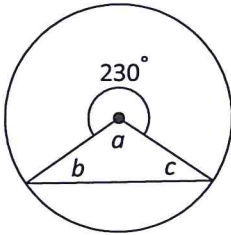


Circle Theorems Topic Review

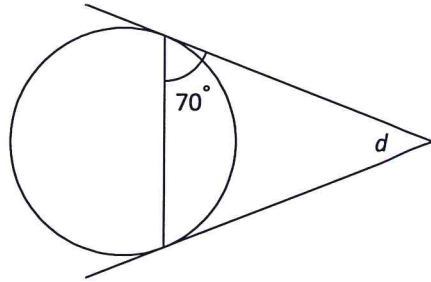
For questions 1 to 14, find the angles labelled with letters, giving full reasons for each answer.

I can recognise isosceles triangles in circle diagrams

1.

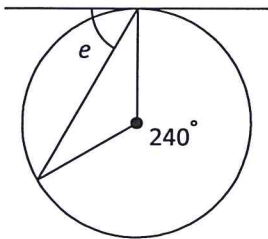


2.



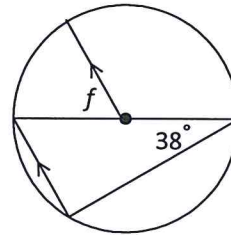
I know the angle between a tangent and a radius

3.



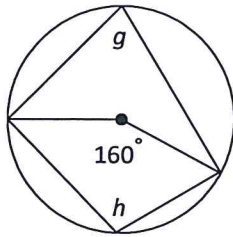
I know the 'angle in a semicircle'

4.

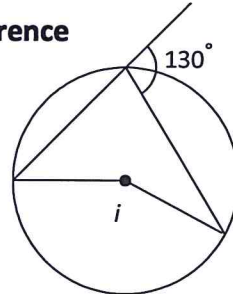


I know about the angle at the centre and the angle at the circumference

5.

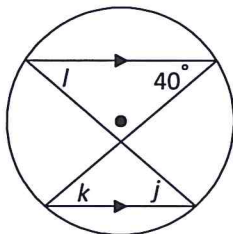


6.

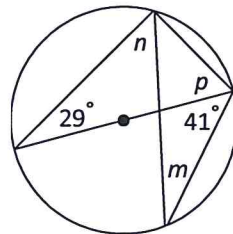


I know about angles on the same arc

7.

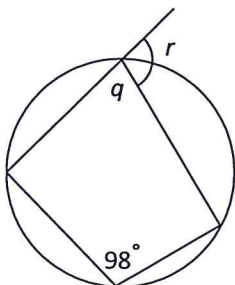


8.

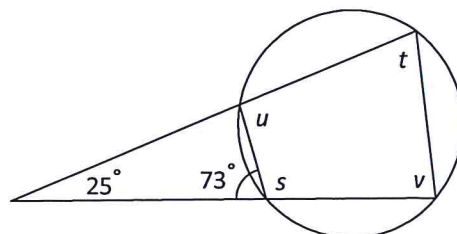


I know about angles in cyclic quadrilaterals

9.

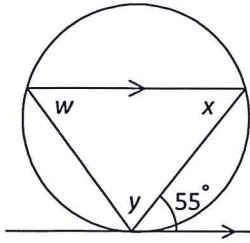


10.

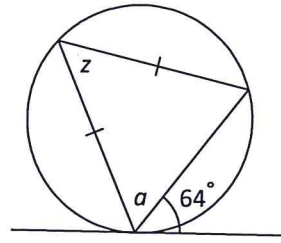


I know the alternate segment theorem

11.

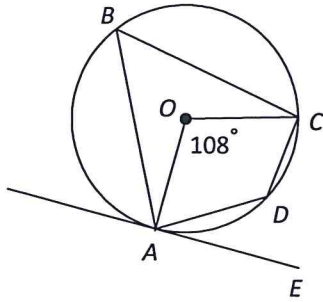


12.

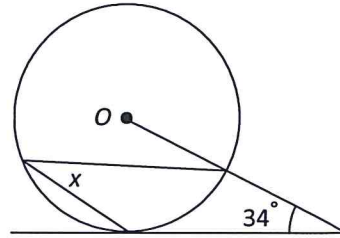


I can decide which theorems to use

13. Find angles ADC and CAE .



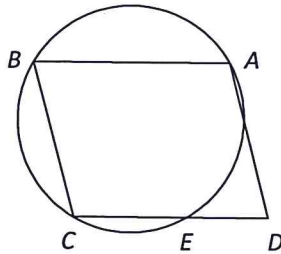
14. Find the angle labelled x .



Hint: draw a radius.

I can use circle theorems to explain results

15. $ABCD$ is a parallelogram. Prove that $AE = AD$.



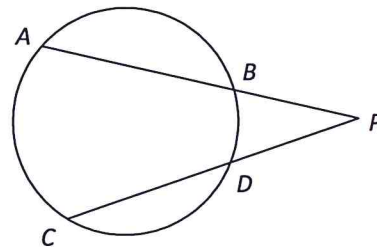
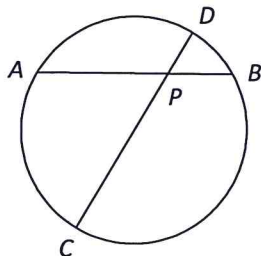
I understand the properties of intersecting chords

16. $AP = 12\text{cm}$, $PB = 4\text{cm}$ and $DP = 6\text{cm}$.

17. $AB = 19\text{cm}$, $BP = 5\text{cm}$ and $DP = 8\text{cm}$.

Find CP .

Find CD .



18. $AP = 9\text{cm}$, $PB = 2\text{cm}$ and $CD = 9\text{cm}$.

Find PD , given that $PD < PC$.

