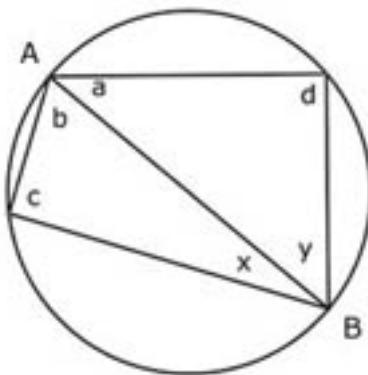


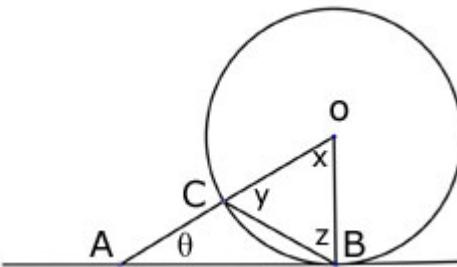
1. Given that AB is a diameter and the values for angles x and y respectively, find angles a, b, c and d.



- (a)  $41^\circ, 69^\circ$  (b)  $39^\circ, 65^\circ$  (c)  $36^\circ, 72^\circ$  (d)  $33^\circ, 75^\circ$  (e)  $40^\circ, 74^\circ$  (f)  $42^\circ, 68^\circ$

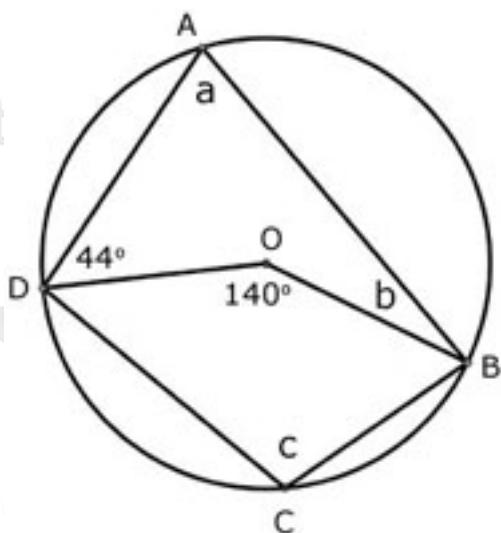
2. O is the centre of the circle with AB a tangent.

Given the value of angle  $\theta$ , find angles x, y and z.



- (a)  $42^\circ$  (b)  $39^\circ$  (c)  $36^\circ$  (d)  $41^\circ$  (e)  $31^\circ$  (f)  $29^\circ$

3. In the circle below with the given angles, find the unknown angles a, b and c.



1.

- |                  |              |              |              |
|------------------|--------------|--------------|--------------|
| (a) a $21^\circ$ | b $49^\circ$ | c $90^\circ$ | d $90^\circ$ |
| (b) a $25^\circ$ | b $51^\circ$ | c $90^\circ$ | d $90^\circ$ |
| (c) a $18^\circ$ | b $54^\circ$ | c $90^\circ$ | d $90^\circ$ |
| (d) a $15^\circ$ | b $57^\circ$ | c $90^\circ$ | d $90^\circ$ |
| (e) a $16^\circ$ | b $50^\circ$ | c $90^\circ$ | d $90^\circ$ |
| (f) a $22^\circ$ | b $48^\circ$ | c $90^\circ$ | d $90^\circ$ |

2.

- |                  |                |                |                  |                |                |
|------------------|----------------|----------------|------------------|----------------|----------------|
| (a) x $48^\circ$ | y $66^\circ$   | z $66^\circ$   | (b) x $51^\circ$ | y $64.5^\circ$ | z $64.5^\circ$ |
| (c) x $54^\circ$ | y $63^\circ$   | z $63^\circ$   | (d) x $49^\circ$ | y $65.5^\circ$ | z $65.5^\circ$ |
| (e) x $59^\circ$ | y $60.5^\circ$ | z $60.5^\circ$ | (f) x $61^\circ$ | y $59.5^\circ$ | z $59.5^\circ$ |

3. a
- $70^\circ$
- b
- $26^\circ$
- c
- $110^\circ$