Question 1: Find the missing angles labelled in each of these circles

(a) 

(b) 

(c) 

(d) 

(e) 

(f) 

(g) 

(h) 

(i) 

(j) 

(k) 

(l) 

© CORBETTMATHS 2018
Circle Theorems
Videos 64/65 on Corbettmaths
Question 2: Calculate the length of sides labelled in the circles below

(a) 
![Graph A](image1.png)

(b) 
![Graph B](image2.png)

(c) 
![Graph C](image3.png)

Question 3: Calculate the length of sides labelled in the circles below

(a) 
![Graph A](image4.png)

(b) 
![Graph B](image5.png)

(c) 
![Graph C](image6.png)

Question 4: Calculate the size of the missing angles

(a) 
![Graph A](image7.png)

(b) 
![Graph B](image8.png)

(c) 
![Graph C](image9.png)

Question 5: State, with a reason, if AB is the diameter in each circle below.

(a) 
![Graph A](image10.png)

(b) 
![Graph B](image11.png)

(c) 
![Graph C](image12.png)
Question 6: Find the missing angles labelled in each of these circles

(a) 
(b) 
(c) 

(d) 
(e) 
(f) 

(g) 
(h) 
(i) 

(j) 
(k) 
(l)
Question 7: Find the missing angles labelled in each of these circles

(a) \[50^\circ\] (b) \[24^\circ\] (c) \[37^\circ\] 

(d) \[81^\circ\] (e) \[97^\circ\] (f) \[91^\circ\] 

(g) \[28^\circ\] \[60^\circ\] (h) \[110^\circ\] (i) \[110^\circ\] 

(j) \[38^\circ\] \[95^\circ\] (k) \[27^\circ\] \[88^\circ\] (l) \[39^\circ\]
Question 8: Find the missing angles labelled in each of these circles

(a) 

(b) 

(c) 

(d) 

(e) 

(f)
Question 9: Find the values of \( x \) and \( y \)

(a) \( 2x + 2y \)  
(b) \( 2x + 4y \)  
(c) \( 6x + y \)  

diagram

Question 10: Find the value of \( x \) in each diagram. The lines \( AB \) and \( AC \) are tangents.

(a) \( \angle B = 27^\circ \)  
(b) \( \angle A = 68^\circ \)  
(c) \( \angle 154^\circ \)  
(d) \( \angle 2x = 1 \)  
(e) \( \angle 158^\circ \)  
(f) \( \angle 15^\circ \)  

diagram
Question 11: Calculate the length of sides labelled in the circles below. The lines AB and AC are tangents.

Question 12: Calculate the size of x in the circles below. The lines AB and AC are tangents.
Question 13: Find the missing angles labelled in each of these circles

(a)  
(b)  
(c)  
(d)  
(e)  
(f)  
(g)  
(h)  
(i)  

© CORBETTMATHS 2018