

Name:

Exam Style Questions

Parts of the Circle



Corbettmaths

Equipment needed: Pen, pencil, compass, ruler & calculator

Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

Video Tutorial

www.corbettmaths.com/contents

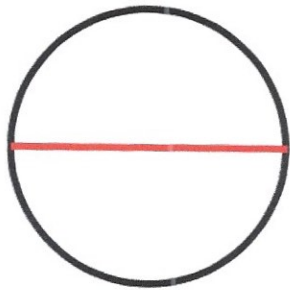
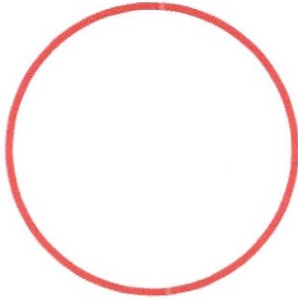
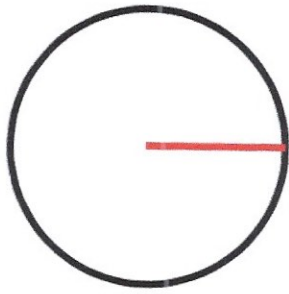
Video 61



Answers and Video Solutions



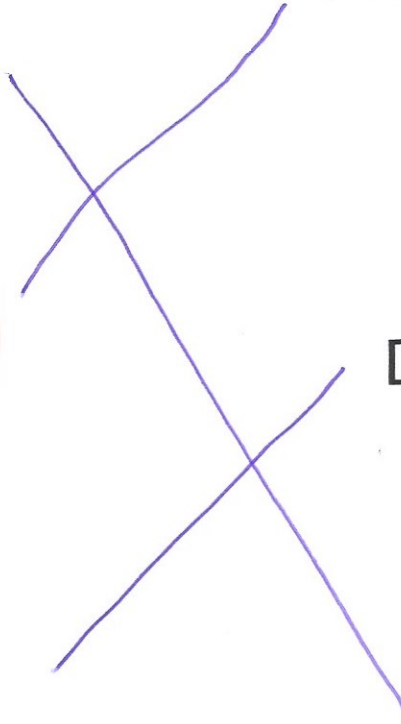
1. Match each diagram to its label.



Circumference

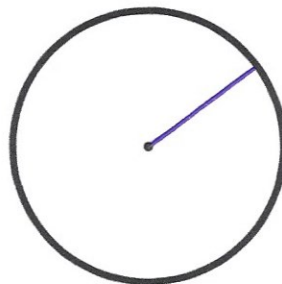
Diameter

Radius



(1)

2. Draw a radius on the circle.



(1)

3.



Here are 6 diagrams and 6 labels.

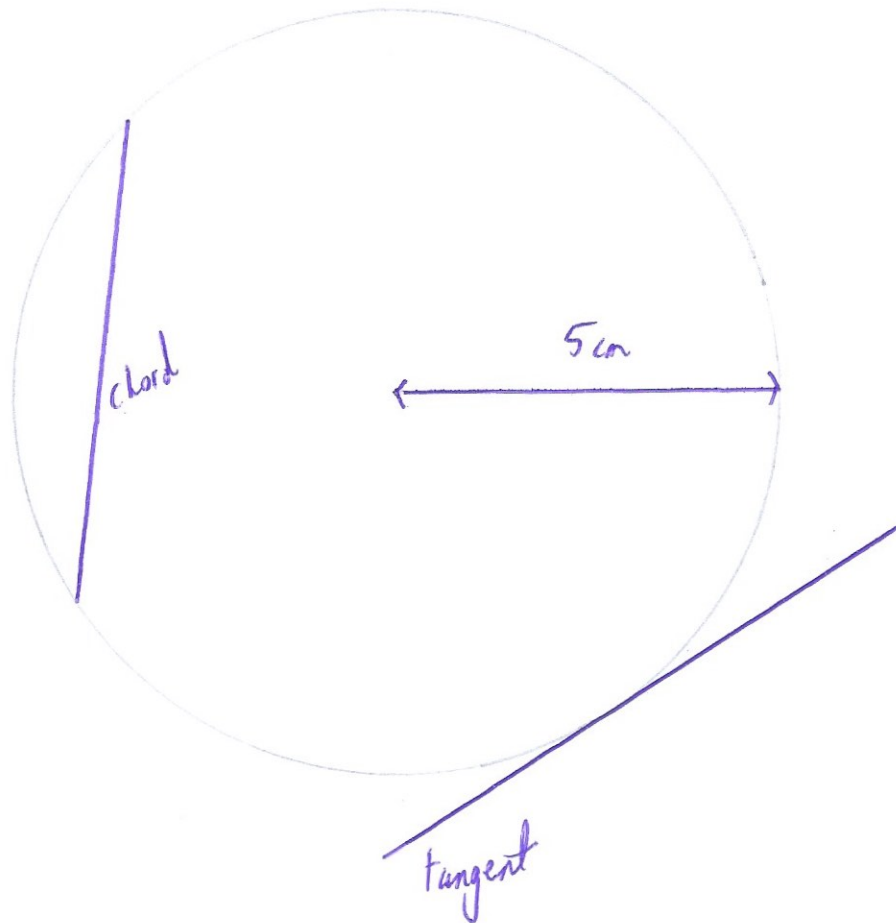
In the diagram the centre of the circle is shown with a dot.

Match each diagram to its label.

One has been done for you.

Label	Diagram
Circle and radius	
Circle and segment	
Circle and arc	
Circle and diameter	
Circle and tangent	
Circle and chord	

4. (a) Draw a circle of radius 5cm.



(1)

- (b) Write down the length of the diameter of the circle.

10cm
(1)

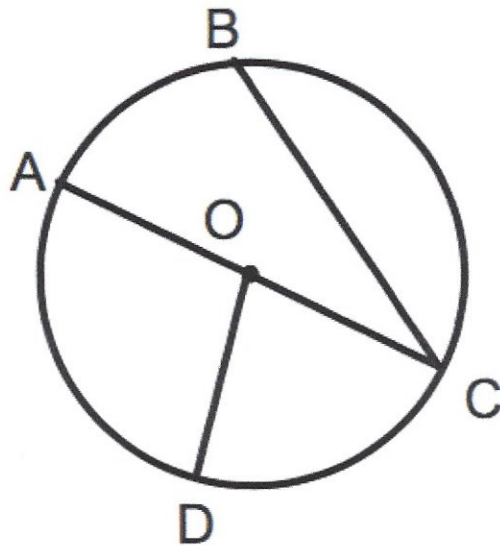
- (c) On your diagram draw a chord.

(1)

- (d) On your diagram draw a tangent to the circle.

(1)

5. Points A, B, C and D are four points on the circle with centre O.

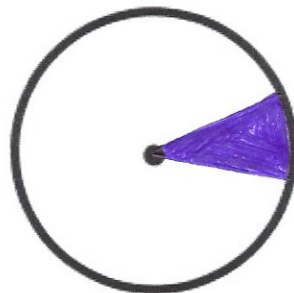


Here are six words that are used with circles.

Arc Diameter Chord Tangent Circumference Radius

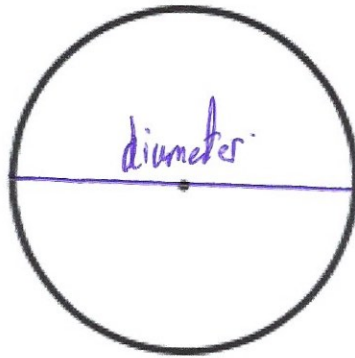
Choose the correct word to describe each line below.

- (a) The straight line AC is a *diameter* of the circle. (1)
- (b) The straight line OD is a *radius* of the circle. (1)
- (c) The straight line BC is a *chord* of the circle. (1)
- (d) Draw a sector of the circle below.



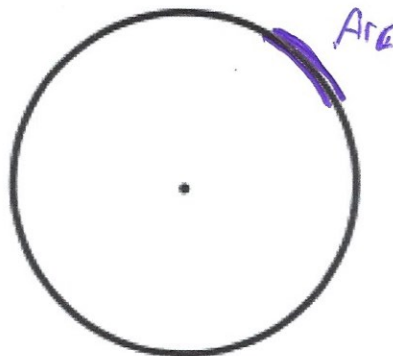
(1)

6. (a) Draw a diameter on the circle.



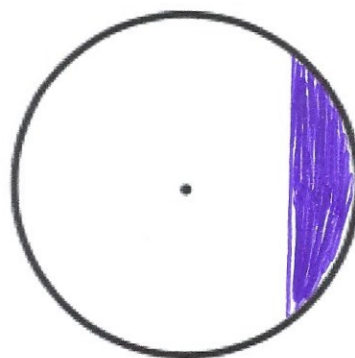
(1)

(b) Draw an arc on the circle.



(1)

(c) Draw and shade in a segment of the circle.



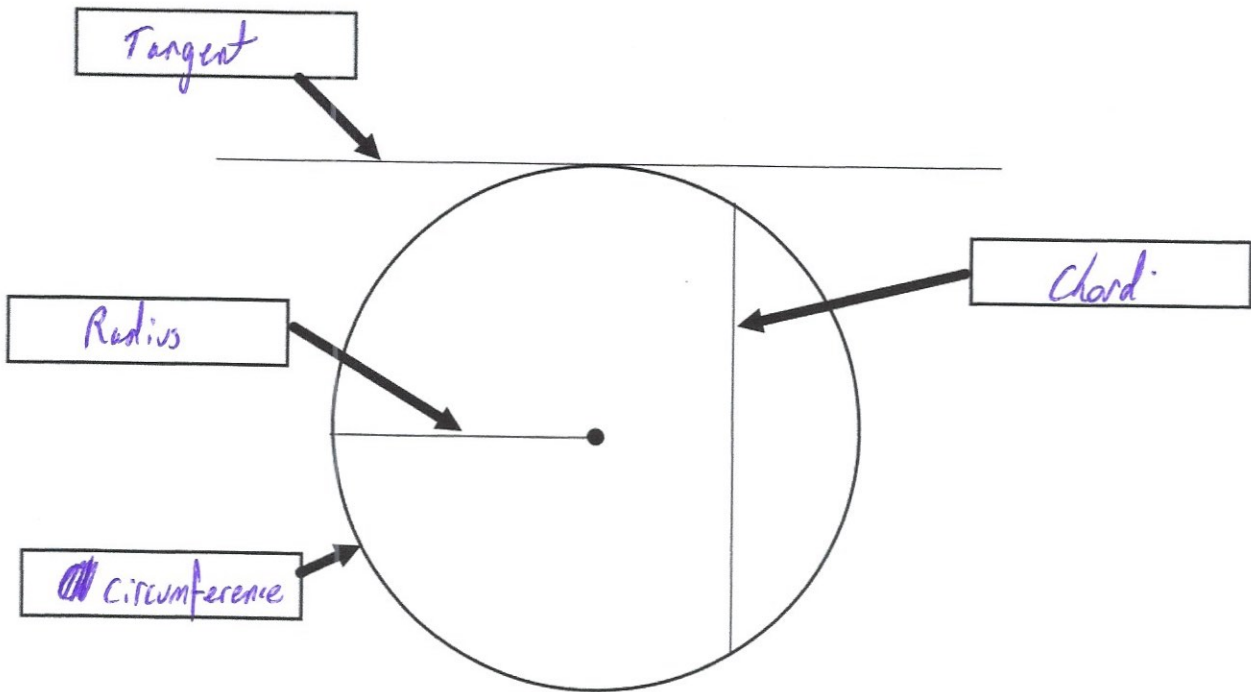
(1)

7. Here is a list of words connected to circles.



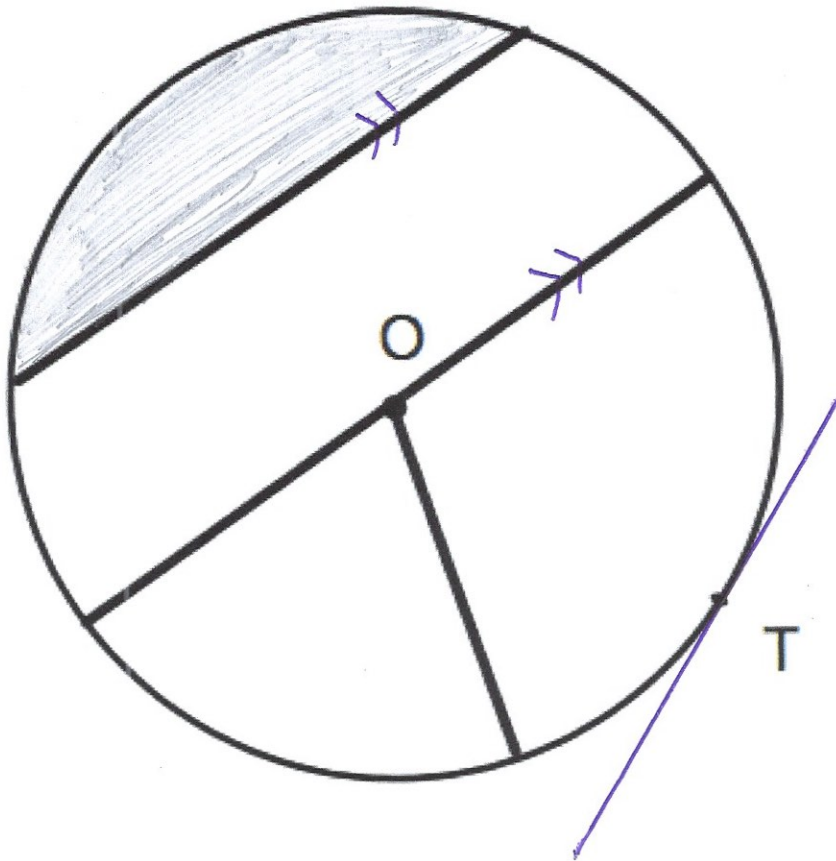
Tangent Radius Diameter Chord Centre Circumference

Label the four boxes in the diagram below, by choosing the correct word from the list.



(4)

8. In the diagram below, O is the centre of the circle.



(a) Mark on the diagram with arrows (\gg) a pair of parallel lines.

(1)

(b) Shade on the diagram a segment of the circle.

(1)

(c) Draw a tangent to the circle at T.

(1)

9. A coin has a radius of 16mm.



Find the diameter of the coin.

32 mm

(1)

10. A hula hoop has a diameter of 106cm.



Find the radius of the hula hoop.

53 cm

(1)

11. Sven measures the radius, circumference, diameter and a chord of a circle.



Circle the largest

Radius

Circumference

Diameter

Chord

(1)

12. Which of the following is a straight line?



Circle your answer.

Arc

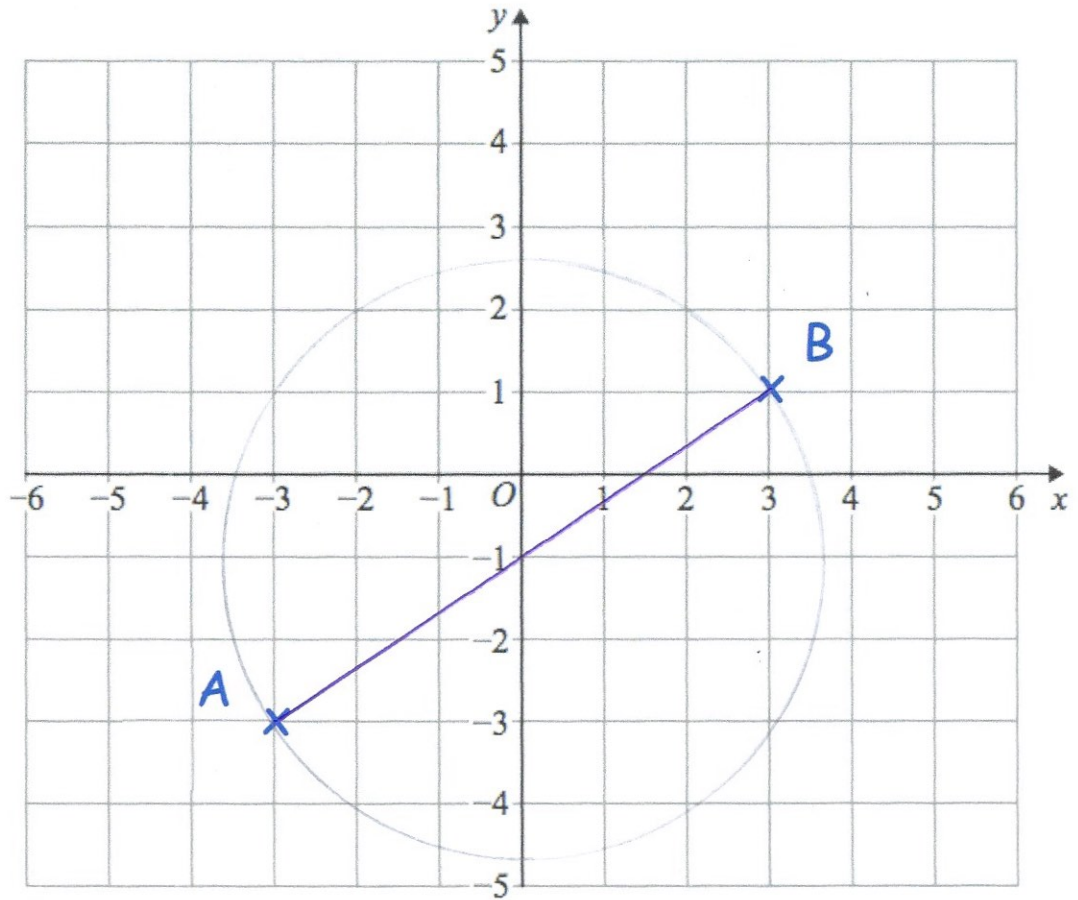
Circumference

Segment

Tangent

(1)

13.



(a) Write down the coordinates of point B

(3, 1)

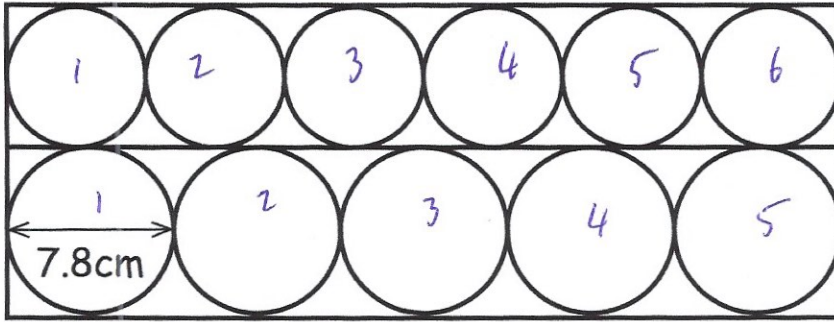
(1)

AB is the diameter of circle C.

(b) Draw circle C.

(1)

14. Some small circles and large circles fit exactly inside a rectangle.



Work out the radius of the small circle

$$7.8 \times 5 = 39 \text{ cm}$$
$$39 \div 6 = 6.5$$
$$6.5 \div 2 = 3.25$$

..... 3.25cm
(3)