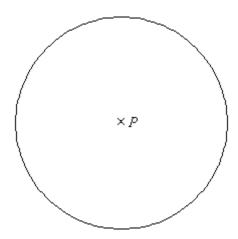
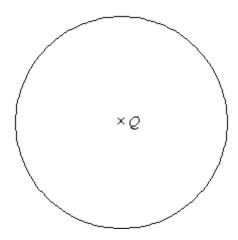
Q1.



(a) In the circle, centre P, draw a radius.

(1)

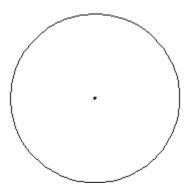


(b) In the circle, centre Q, draw a chord.

(Total 2 marks)

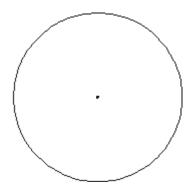
**Q2.** (a) In the circle below, draw a diameter.

#### **Edexcel Maths GCSE - Circles (F)**



(1)

(b) In the circle below, draw a sector. Shade your sector.

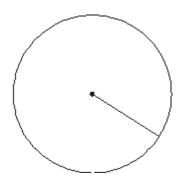


(1) (Total 2 marks)

**Q3.** Here are some words which describe parts of a circle.

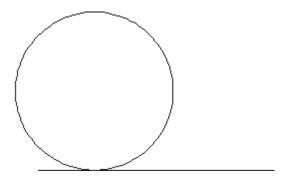
Radius	Diameter	Sector
Chord	Tangent	Segment

(a) Write down the mathematical name of the straight line shown in this diagram. Use one of the words from the box.



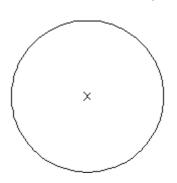
(1)

(b) Write down the mathematical name of the straight line shown in the diagram. Use one of the words from the box.



(1) (Total 2 marks)

**Q4.** In the circle, draw a diameter.



(Total 1 mark)

**Q5.** (a) The point O has been marked with a cross (X).

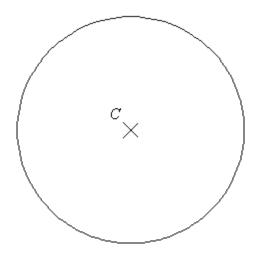
Draw a circle with radius 4 cm and centre O.



(1)

(b) Here is a circle centre C.

Draw a diameter in the circle.



(1) (Total 2 marks)

#### M1.

	Answer	Mark	Additional Guidance
(a)	draw radius	1	<b>B1</b> (do not accept diameter) Ignore extras if correct
(b)	draw chord	1	B1 (accept diameter) Ignore extras if correct
			Total for Question: 2 marks

# M2.

	Answer	Mark	Additional Guidance
(a)	diameter	1	<b>B1</b> for a diameter drawn
(b)	Sector	1	<b>B1</b> for sector drawn (ignore shading)
			Total for Question: 2 marks

## M3.

	Answer	Mark	Additional Guidance
(a)	Radius	1	B1 ignore spelling
(b)	Tangent	1	B1 ignore spelling

Total for Question: 2 marks

## M4.

Answer	Mark	Additional Guidance
Diameter drawn	1	B1 for a diameter drawn
		Total for Question: 1 mark

## M5.

	Answer	Mark	Additional Guidance
(a)	circle drawn	1	<b>B1</b> for a circle drawn within guidelines (see overlay)
(b)	diameter drawn	1	<b>B1</b> for line through $C$ and touching circle at both ends
			Total for Question: 2 marks

E1.	This question was well understood with 53% of candidates obtaining the correct
	answer for part (a) and 39% of candidates for part (b). Diameters were a key element in
	this question, in part (a) diameters were not allowed even though they might be
	considered to be two radii; though they were accepted in part (b) since a diameter does
	join two points on a circumference.

**E2.** Another well-understood question with most candidates gaining both marks though many radii were seen for (a) and segments for part (b). Candidates were expected to draw diameters within 2mm of the circumference for part (a) and semicircles were awarded the mark in (b).

**E3.** Candidates struggled with this question that is often tested in this paper and frequently made mistakes with the names of parts of a circle. Only 30% of candidates could write both parts correctly and a further 40% could write one part correctly, usually the tangent.

**E4.** It was disappointing to see that just over a half of the candidates were able to draw a diameter in the circle. As it was not the intention to assess accurate drawing in this question, freehand drawing was usually accepted as long as the intention was clear.

Unfortunately, many candidates drew a radius or more than one radius and some drew a radius and a diameter. This could not be accepted unless the diameter was labelled. Some candidates attempted to draw a freehand circle inside the given circle given whilst other candidates did not attempt the question at all.

**E5.** In part (a) it was obvious that many candidates did not have a compass, and therefore wasted this mark. Those who did have a compass usually presented an accurate circle. In part (b) it was surprising the number of candidates who failed to draw a diameter. A common error was predictably the drawing of a radius, but many drew the diameter as a chord, perhaps through the letter C rather than the centre X, or left the question blank.