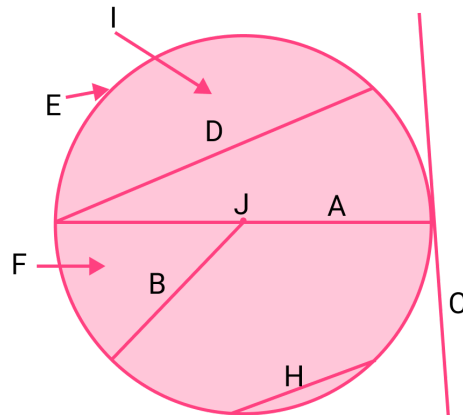


Parts of a Circle - Worksheet

Skill

Group A - Identifying parts of a circle

Identify the following parts of a circle using the diagram below:



- | | | |
|--|--|---|
| 1) What is the name of the line labelled <i>A</i> that passes through the point <i>J</i> ? | 2) What is the name of the line labelled <i>B</i> ? | 3) What is the name of the line labelled <i>C</i> ? |
| 4) What is the name of the line labelled <i>D</i> ? | 5) What is the name of the line labelled <i>E</i> (equivalent to the perimeter of the circle)? | 6) What is the name of the enclosed area labelled <i>F</i> ? |
| 7) What is the name of the line labelled <i>H</i> ? | 8) What is the name of the enclosed area labelled <i>I</i> ? | 9) The point <i>J</i> is usually labelled 'O'. What is the name of this part of the circle? |

Group B - Labelling parts of a circle

Draw a circle and label the following parts:

- | | | |
|-----------|------------|------------------|
| 1) Centre | 2) Radius | 3) Diameter |
| 4) Chord | 5) Tangent | 6) Circumference |
| 7) Arc | 8) Segment | 9) Sector |

Group C - Labelling parts of a circle

Draw and label the following parts of a circle:

- | | | |
|-----------------|------------------|------------------|
| 1) Minor Sector | 2) Major Sector | 3) Minor Arc |
| 4) Major Arc | 5) Minor Segment | 6) Major Segment |

Parts of a Circle - Worksheet

Applied

- 1) (a)** Which is the longest part of the same circle?
 - Minor Arc
 - Major Arc
- (b)** Which is the largest area of the same circle?
 - Minor Segment
 - Major Segment
- 2) (a)** The circumference of a circle is 60cm .
The length of arc 'A' is 35cm .

Is this arc a major or minor arc?
- (b)** The central angle of a sector is 200°
Is this a major or minor sector?

A segment is created with an arc length of 20m . The circumference of the circle is 50m .
- (c)** Is this segment a major or minor segment?
- 3)** What is the central angle of a segment which creates a semi circle?
- 4)** Which has the greater area?
 - A Major Sector
 - A Major Segment

Parts of a Circle - Exam Questions

- 1) (a) Here is a list of parts of a circle:

TANGENT

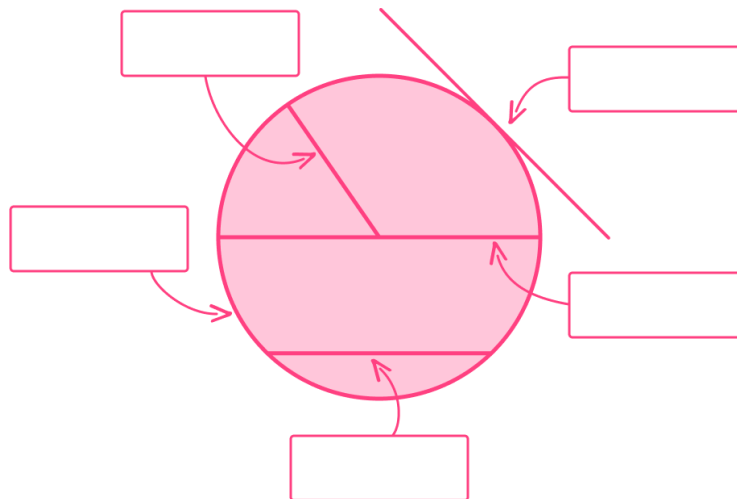
RADIUS

CHORD

DIAMETER

CIRCUMFERENCE

Label the circle correctly using these words.



(5)

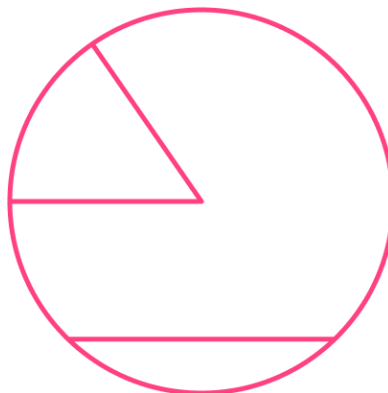
- (b) Which is the longest: the radius, diameter, or the circumference?

.....

(1)

(6 marks)

- 2) (a) On the diagram below, shade the minor sector of the circle.



(1)

- (b) On the same diagram, label the chord.

(1)

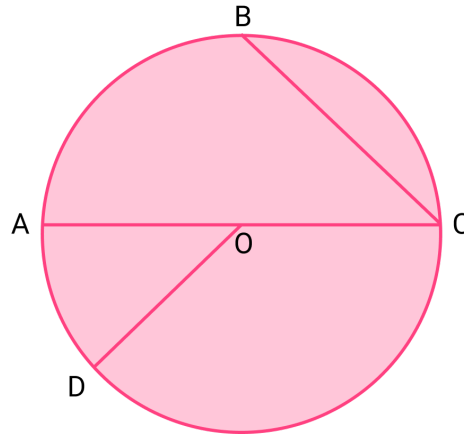
- (c) On the same diagram, label the centre O .

(1)

(3 marks)

Parts of a Circle - Exam Questions

- 3) Below is a diagram of a circle where A, B, C, and D are points on the circumference, and O is the centre of the circle.



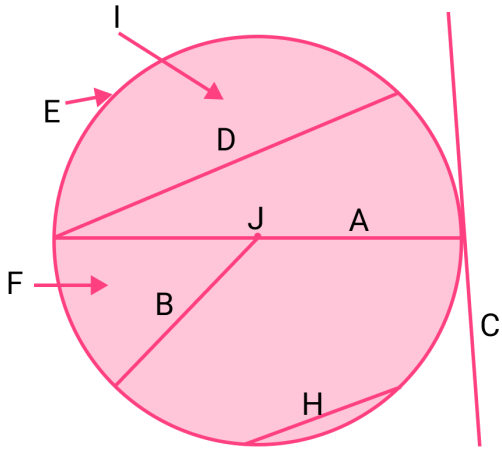
Here are words used to describe parts of a circle:

Arc	Diameter	Chord	Segment
Tangent	Circumference	Radius	Sector

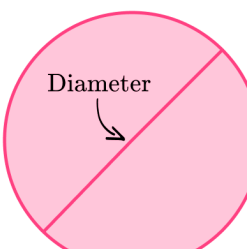
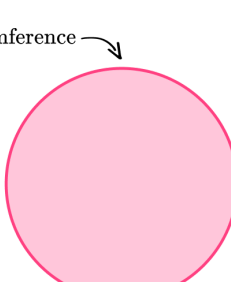
Choose the correct word to make each statement correct:

- (a) The straight line AC is the _____ of the circle. (1)
- (b) The straight line OD is the _____ of the circle. (1)
- (c) The straight line BC is the _____ of the circle. (1)
- (d) The area enclosed within AOD is a _____ of the circle. (1)
- (e) The curved line CD is the _____ of the circle. (1)
- (5 marks)**

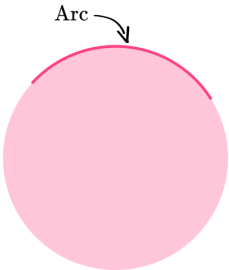
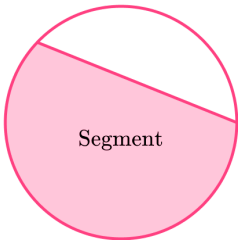
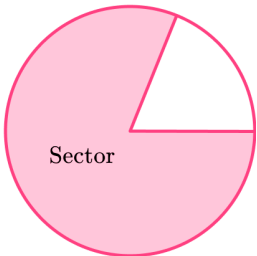
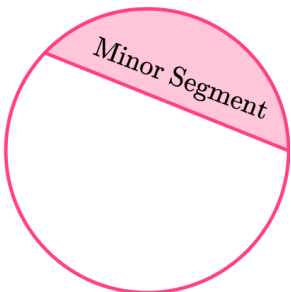
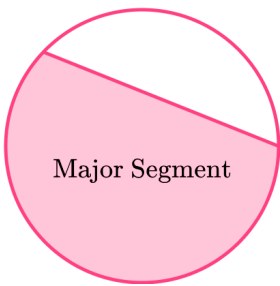
Parts of a Circle - Answers

	Question	Answer
	Skill Questions	
Group A	<p>Identify the following parts of a circle using the diagram below:</p>  <p>1) What is the name of the line labelled <i>A</i> that passes through the point <i>J</i>?</p> <p>2) What is the name of the line labelled <i>B</i>?</p> <p>3) What is the name of the line labelled <i>C</i>?</p> <p>4) What is the name of the line labelled <i>D</i>?</p> <p>5) What is the name of the line labelled <i>E</i> (equivalent to the perimeter of the circle)?</p> <p>6) What is the enclosed name of the area labelled <i>F</i>?</p> <p>7) What is the name of the line labelled <i>H</i>?</p> <p>8) What is the enclosed name of the area labelled <i>I</i>?</p> <p>9) The point <i>J</i> is usually labelled 'O'. What is the name of this part of the circle?</p>	<p>1) Diameter</p> <p>2) Radius</p> <p>3) Tangent</p> <p>4) Chord</p> <p>5) Circumference</p> <p>6) Sector (minor)</p> <p>7) Chord</p> <p>8) Segment (minor)</p> <p>9) Centre (origin)</p>

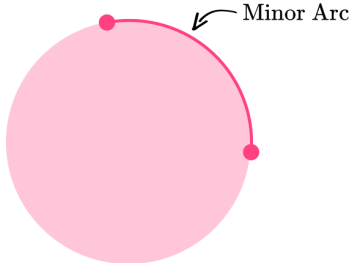
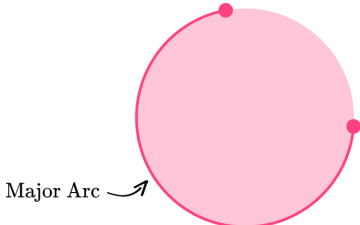
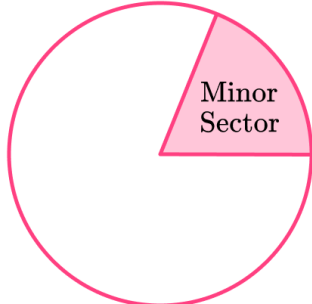
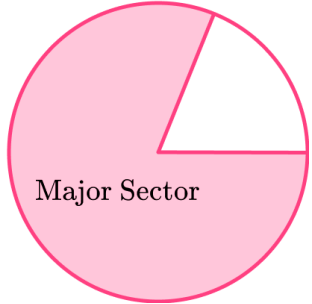
Parts of a Circle - Answers

Group B	<p>Draw a circle and label the following parts:</p> <p>1) Centre</p> <p>2) Radius</p> <p>3) Diameter</p> <p>4) Chord</p> <p>5) Tangent</p> <p>6) Circumference</p>	<p>1) </p> <p>2) </p> <p>3) </p> <p>4) </p> <p>5) </p> <p>6) </p>
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Parts of a Circle - Answers

<p>Group B</p> <p>contd</p>	<p>7) Arc</p> <p>8) Segment</p> <p>9) Sector</p>	<p>7)</p>  <p>8)</p>  <p>9)</p> 
<p>Group C</p>	<p>Draw and label the following parts of a circle:</p> <p>1) Minor segment</p> <p>2) Major segment</p>	<p>1)</p>  <p>2)</p> 

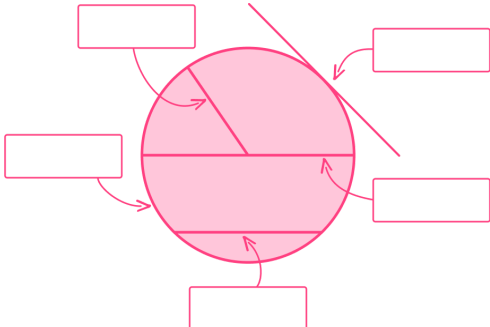
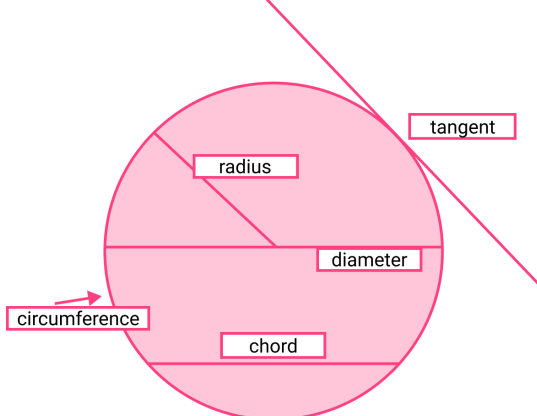
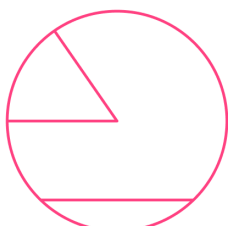

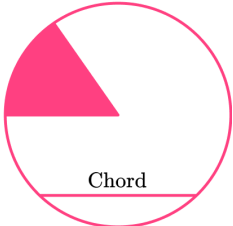
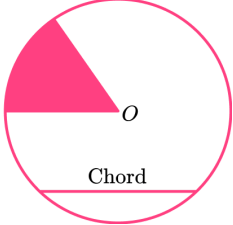
Parts of a Circle - Answers

Group C contd	<p>3) Minor arc</p> <p>4) Major arc</p> <p>5) Minor sector</p> <p>6) Major sector</p>	<p>3) </p> <p>4) </p> <p>5) </p> <p>6) </p>
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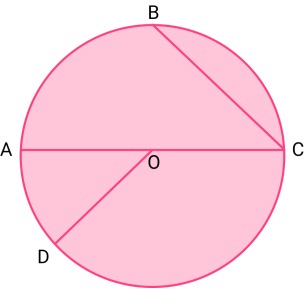
Parts of a Circle - Answers

	Question	Answer
	Applied Questions	
1)	<p>a) Which is the longest part of the same circle?</p> <ul style="list-style-type: none"> - Minor Arc - Major Arc <p>b) Which is the largest area of the same circle?</p> <ul style="list-style-type: none"> - Minor Segment - Major Segment 	<p>a) Major arc</p> <p>b) Major segment</p>
2)	<p>a) The circumference of a circle is 60cm. The length of arc 'A' is 35cm.</p> <p>Is this arc a major or minor arc?</p> <p>b) The central angle of a sector is 200° Is this a major or minor sector?</p> <p>A segment is created with an arc length of 20m. The circumference of the circle is 50m.</p> <p>c) Is this segment a major or minor segment?</p>	<p>a) Major arc</p> <p>b) Major sector</p> <p>c) Minor segment</p>
3)	What is the central angle of a segment which creates a semi circle?	180°
4)	<p>Which has the greater area?</p> <ul style="list-style-type: none"> - A Major Sector - A Major Segment 	Either

Parts of a Circle - Mark Scheme

	Question	Answer	
	Exam Questions		
1) (a)	<p>Here is a list of parts of a circle:</p> <p>TANGENT RADIUS CHORD</p> <p>DIAMETER CIRCUMFERENCE</p> <p>Label the circle correctly using these words.</p> 	<p>(a)</p>  <p>Tangent labelled correctly Radius labelled correctly Chord labelled correctly Diameter labelled correctly Circumference labelled correctly</p>	<p>(1) (1) (1) (1) (1)</p>
(b)	Which is the longest: the radius, diameter, or the circumference?	(b) Circumference	(1)
2) (a)	<p>On the diagram below, shade the minor sector of the circle.</p> 	<p>(a)</p> 	(1)
(b)	On the same diagram label the chord	<p>(b)</p> 	(1)
(c)	On the same diagram label the centre as <i>O</i>	<p>(c)</p> 	(1)

Parts of a Circle - Mark Scheme

3)	<p>Below is a diagram of a circle where A, B, C, and D are points on the circumference, and O is the centre of the circle.</p>  <p>Here are words used to describe parts of a circle:</p> <table border="1" data-bbox="272 797 903 920"> <tbody> <tr> <td>Arc</td><td>Diameter</td><td>Chord</td><td>Segment</td></tr> <tr> <td>Tangent</td><td>Circumference</td><td>Radius</td><td>Sector</td></tr> </tbody> </table> <p>Choose the correct word to make each statement correct:</p>	Arc	Diameter	Chord	Segment	Tangent	Circumference	Radius	Sector		
Arc	Diameter	Chord	Segment								
Tangent	Circumference	Radius	Sector								
(a)	The straight line AC is the _____ of the circle.	(a) Diameter	(1)								
(b)	The straight line OD is the _____ of the circle.	(b) Radius	(1)								
(c)	The straight line BC is the _____ of the circle.	(c) Chord	(1)								
(d)	The area enclosed within AOD is a _____ of the circle.	(d) (Minor) Sector	(1)								
(e)	The curved line CD is the _____ of the circle.	(e) Arc	(1)								

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