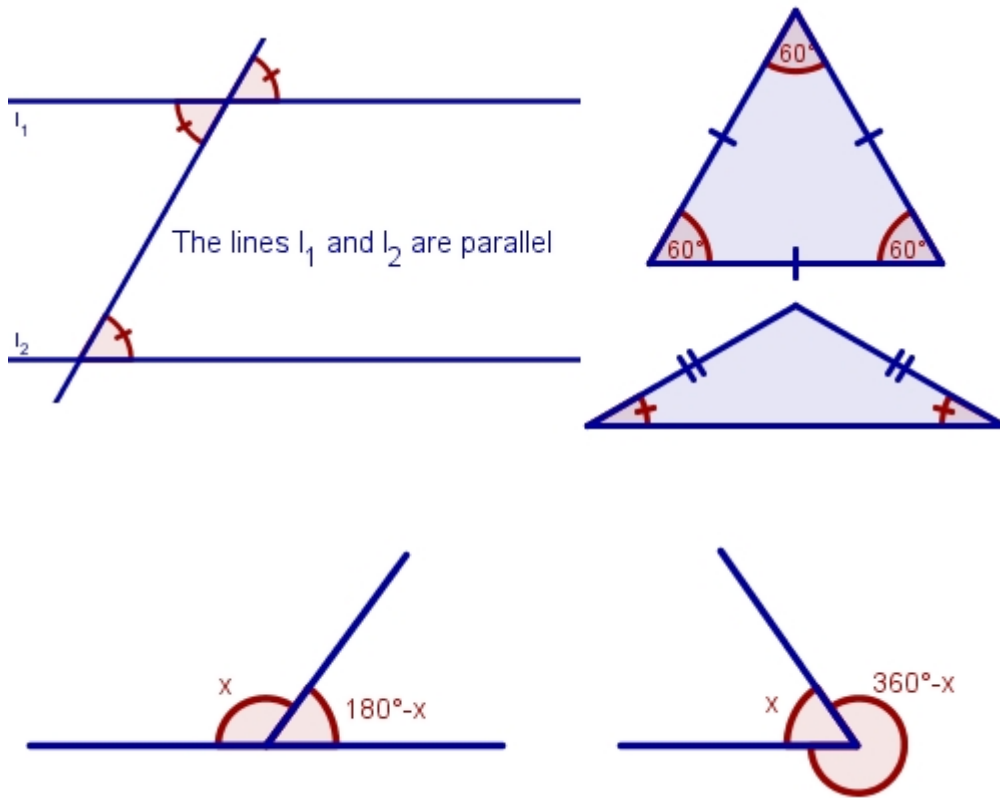


Preparing for the test week 11

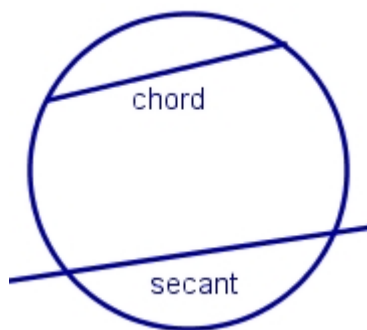
Read this but don't do any exercises; instead do the exercises from old exams on a separate paper.

Topic	PDPA-chapters	PDPB-chapters
Quadratic functions The content of 20D in the PDPB-book is included in 17C in the PDPA-book The chapters 17E in the PDPA-book has the same content as chapter 20F in the PDPB-book	17A Quadratic functions 17B Graphs of quadratic functions 17C Axis intercepts 17D Axis of symmetry and vertex 17E Quadratic optimisation	20A Quadratic functions 20B Graphs of quadratic functions 20C Axis intercepts 20D Graphs from axis intercepts 20E Axis of symmetry and vertex 20F Quadratic modelling
Congruence and similarity	6C Congruent triangles 6D Similarity	9C Congruent triangles 9D Similarity
Circle theorems and angles This is a bit messy, see the description below on what you should know.	Some of: 21A Circle theorems 21B Further circle theorems	Some of: 16B Circle theorems 16C Further circle theorems
Trigonometry Triangle definition	10A Trigonometric ratios 10B Trigonometric problem solving	12C Labelling triangles 12D The trigonometric ratios 12E Trigonometric problem solving
Trigonometry Unit circle	10D The unit circle	12B The unit circle 12I The full unit circle
Angles, circles, arcs and sectors Chapter 7.1 in the copied paper ...and also The content of Chapter 7.2 which is covered in the PDP-books Chapter 7.3 Graphs of trigonometric functions: You should know how the graphs of sine, cosine and tangent look like.		

Angles, you should know this:

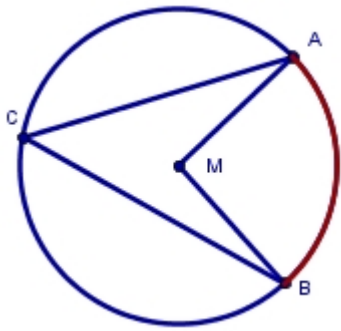


Circle theorems, you should know this:



A **chord** of a circle is a line segment whose endpoints both lie on the circle.

A **secant** of a circle is a line that intersects the circle at two points

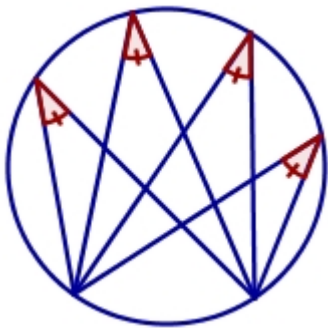


An **inscribed angle** is the angle formed by two chords having a common endpoint. The other endpoints define the **intercepted arc**.

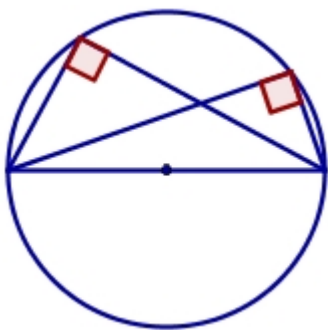
The **central angle** of the intercepted arc is the angle at the midpoint of the circle.

In the picture to the left, the inscribed angle is the angle ACB , and the central angle is the angle AMB .

Theorem: The central angle is twice as large as the inscribed angle if they both are angles on the same intersecting arc.



From the theorem above it follows that: Inscribed angles on the same intersecting arc are all equal.



It also follows that: The inscribed angle in a semi-circle is 90° , this is called Thales' Theorem