## Kursprov, vårterminen 2014

## Mathematics

## Delprov C



## Instructions - Part C

Time for the test

Aids

Tasks

Grading limits The test (Part A-D) gives a total maximum of 92 points.
Limit for test grade
E: At least 22 points.
D: At least 36 points of which at least 12 points at level C or higher.
C: At least 49 points of which at least 23 points at level C or higher.
B: At least 62 points of which at least 7 points at level A.
A: At least 71 points of which at least 12 points at level $A$.

Name: $\qquad$
Date of birth: $\qquad$
Program: $\qquad$ Class: $\qquad$

Also write your name, date of birth, program and class on the sheets you hand in.

[^0]The sum of the interior angles of a triangle is $180^{\circ}$

$a$ and $b$ are supplementary angles
$a$ and $b$ together make $180^{\circ}$
$a+b=180^{\circ}$
 exterior angles of the triangle?

The angle $u$ is an exterior angle of a square (see figure).

- How many degrees is the sum of the exterior angles of a square?


One way of determining the sum of the exterior angles is to use the following trick. Place your pencil along one side of a pentagon. Turn the pen. Then continue to turn the pen so that it is placed in turn along all the sides (see figure).


- How many degrees has the pen turned when it is back at the side where you started, that is, what is the sum of the pentagon's exterior angles, in degrees?
- How many degrees is one exterior angle of a regular pentagon and how many degrees is one interior angle of a regular pentagon?
- Use your results and continue to investigate, with the help of exterior angles, which relationships exist for the interior angles of regular polygons.



## When assessing your work, the teacher will consider

- what mathematical knowledge you have shown and how well you have carried out the task
- how well you have explained your work and given reasons for your conclusions
- how well you have presented your work.


[^0]:    Illustration: Jens Ahlbom

