1 Karl's graph

$$\tan \alpha = \frac{\sin \alpha}{\cos \alpha}$$

$\sin \alpha$

$\cos \alpha$

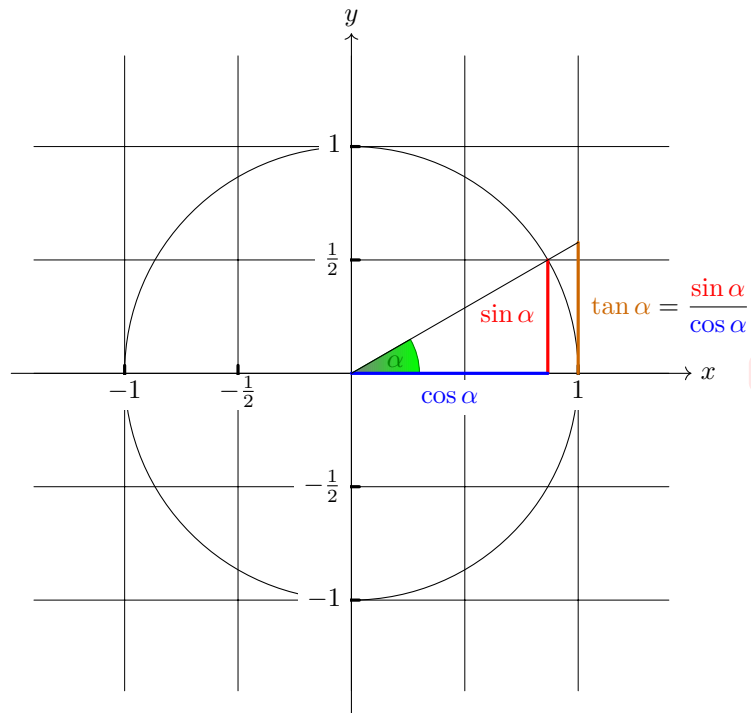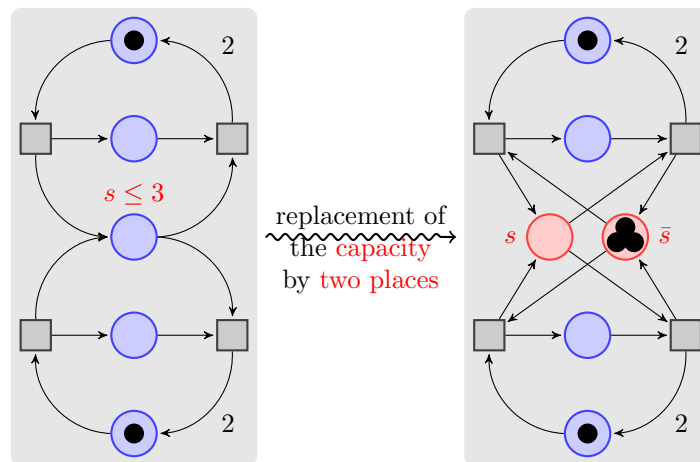α

The angle α is 30° in the example ($\pi/6$ in radian). The sine of α which is the height of the red line is

$$\sin \alpha = 1/2.$$
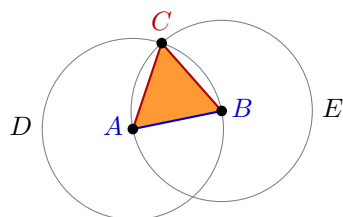
By the theorem of Pythagoras,...

2 Petri Nets

$s \leq 3$

replacement of the capacity by two places

s $\bar{s}$

3 Book I, Proposition I

Proposition I
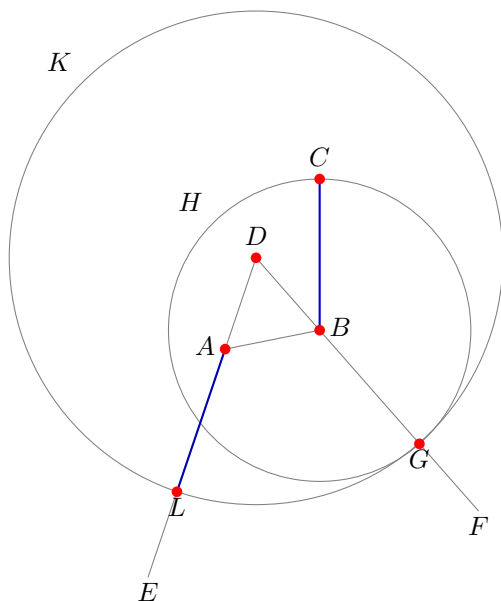*To construct an equilateral triangle on a given finite straight line.*
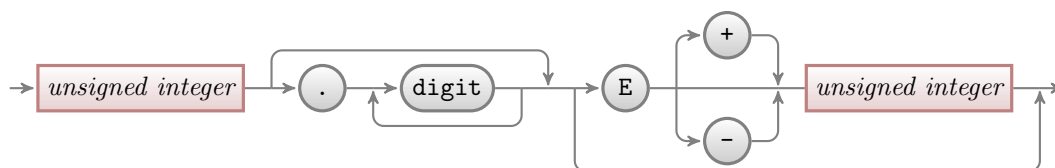
Let AB be the given finite straight line. ...
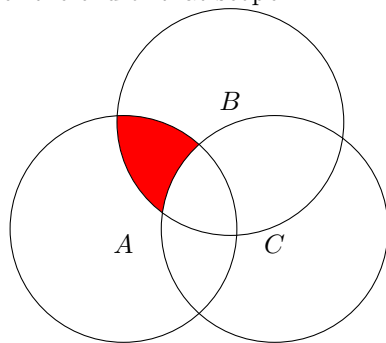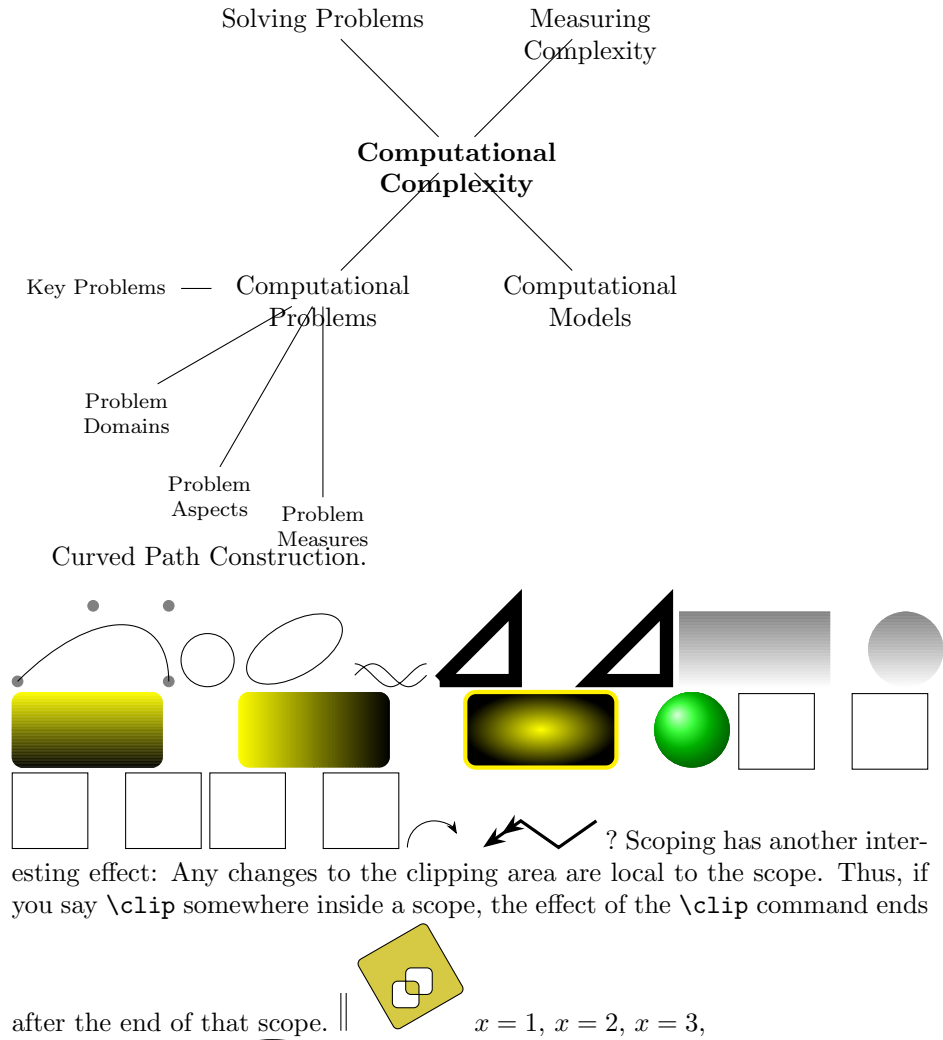
4 Book I, Proposition II

Proposition II
To place a a straight line equal to a given straight line ...

5 Diagrams as Simple Graphs

6   Johannes Lecture Map

Solving Problems

Measuring
Complexity

**Computational
Complexity**

Key Problems — Computational
Problems

Computational
Models

Problem
Domains

Problem
Aspects

Problem
Measures

Curved Path Construction.

? Scoping has another inter-
esting effect: Any changes to the clipping area are local to the scope. Thus, if
you say \clip somewhere inside a scope, the effect of the \clip command ends

after the end of that scope. ‖ $x = 1$, $x = 2$, $x = 3$,

B

A   *C*

○ ○ ○ ○ ○ ○ ○ ○ ○ ○ We can also nest loops to create interesting effects.

1,5	2,5	3,5	4,5	5,5
1,4	2,4	3,4	4,4	5,4
1,3	2,3	3,3	4,3	5,3
1,2	2,2	3,2	4,2	5,2
1,1	2,1	3,1	4,1	5,1

7,5	8,5	9,5	10,5	11,5	12,5
7,4	8,4	9,4	10,4	11,4	12,4
7,3	8,3	9,3	10,3	11,3	12,3
7,2	8,2	9,2	10,2	11,2	12,2
7,1	8,1	9,1	10,1	11,1	12,1

Labeling examples using TikZ.

Text at `node 2`

Text at `node 1`
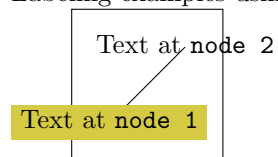
You can also position labels on curves and, by adding the `sloped` option, have them rotated such that they match the line's slope.

near start   middle   very near end

Using pics to reuse a piece of code in a picture.

α