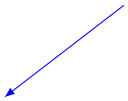
The testing and demonstrative pictures

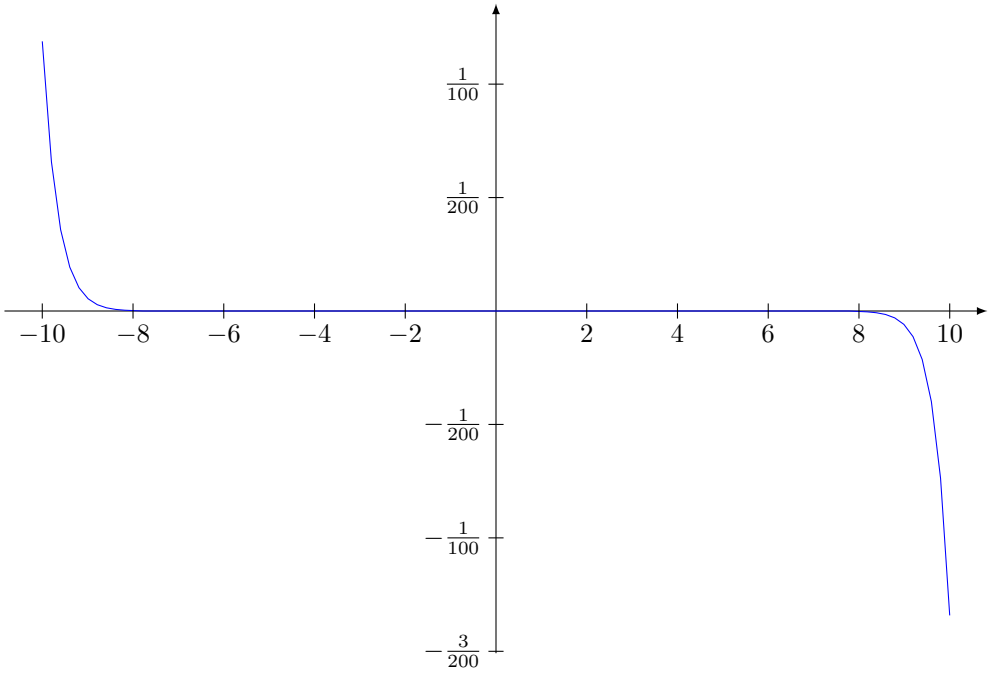
Laurent Claessens

June 23, 2017

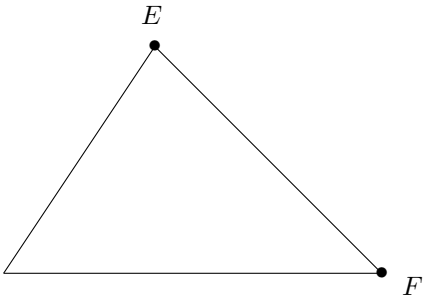
Picture : `ERPMooZibfNOiU`



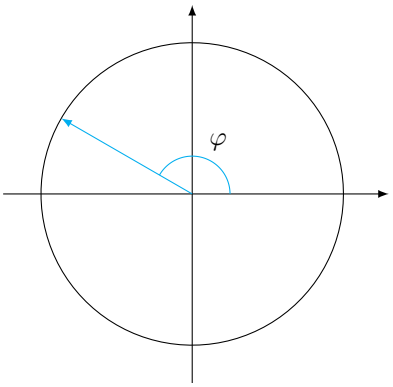
Picture : `XOLBooGcrjiwoU`



Picture : `JRCJooPHFcKn`



Picture : TgCercleTrigono



Picture `CercleTrigono` The result is on figure 1.

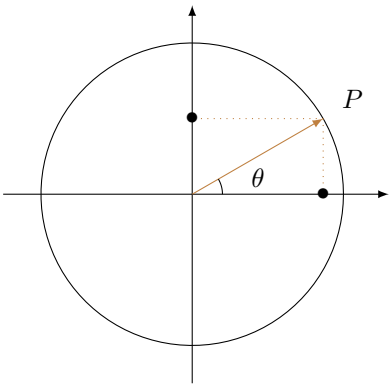
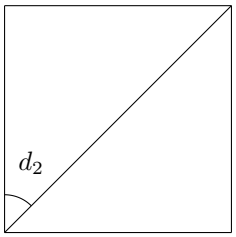
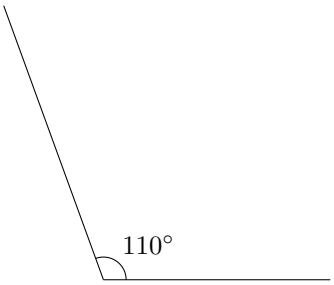


Figure 1: <+Type your caption here+>

Picture : `UOEOooLxhpSC`



Picture : `AAPMooHEcnzW`



Picture `SFdgHdO` The result is on figure 2.

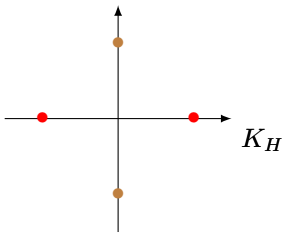
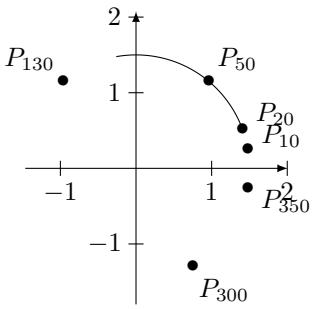
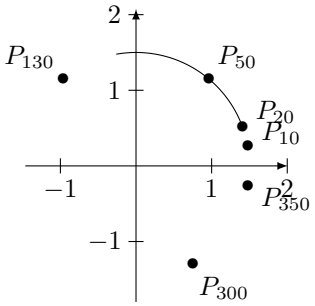


Figure 2: <+Type your caption here+>

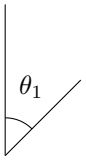
Picture `exCircleTwo`



Picture `exCircleTwo`

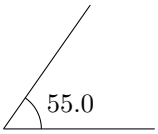


Picture : Refraction

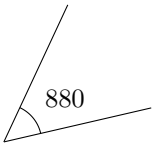


Picture `OMPAooMbyOIqeA`

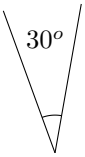
mMó



(a) The angle measure has to be placed correctly

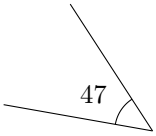


(b) The angle measure has to be placed correctly

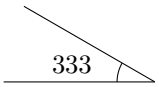


(c) The angle measure has to be placed correctly

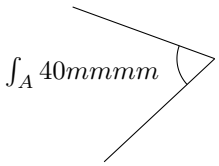
(d) The angle measure has to be placed correctly



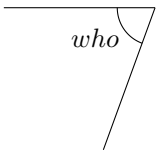
(e) The angle measure has to be placed correctly



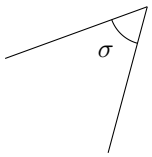
(f) The angle measure has to be placed correctly



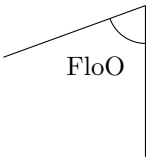
(g) The angle measure has to be placed correctly



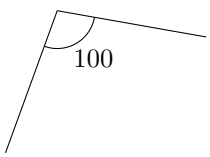
(h) The angle measure has to be placed correctly



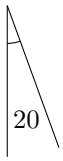
(i) The angle measure has to be placed correctly



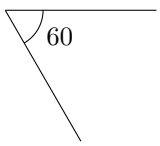
(j) The angle measure has to be placed correctly



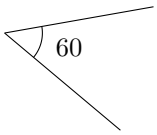
(k) The angle measure has to be placed correctly



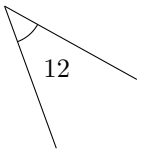
(l) The angle measure has to be placed correctly



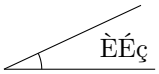
(m) The angle measure has to be placed correctly



(n) The angle measure has to be placed correctly



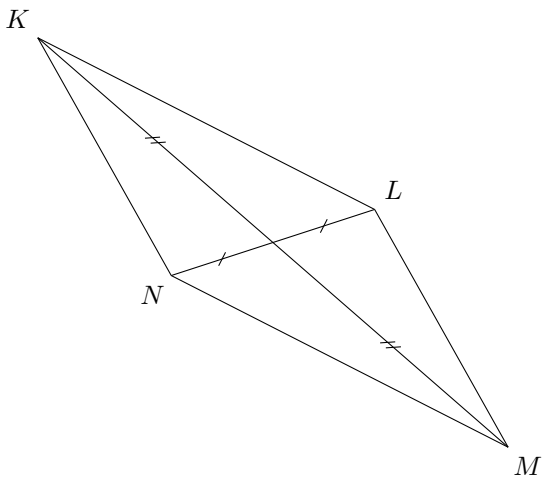
(o) The angle measure has to be placed correctly



(p) The angle measure has to be placed correctly

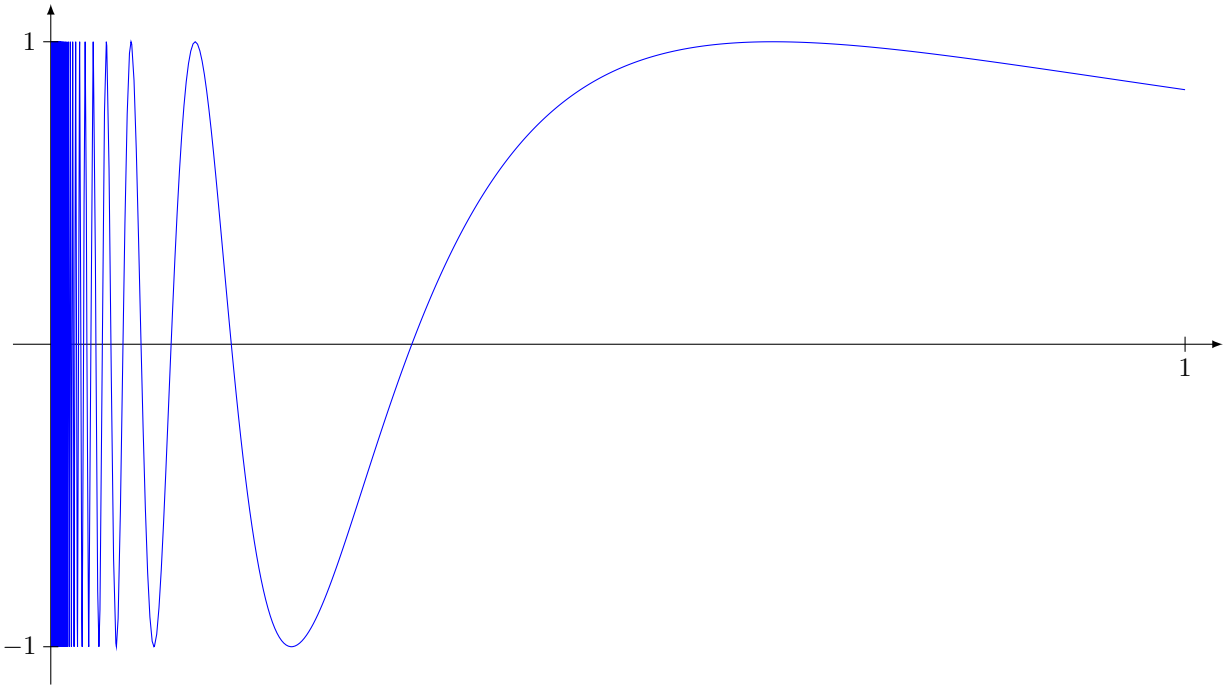
Figure 3: Marks are correct.

Picture `FMLCooxHtqRzUz`

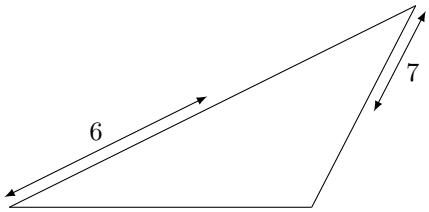


Comment : The segments KM is divided by // and the segment NL by a simple /.

Picture `BHESoofmkTbbZR` : the famous $f(x) = \sin(1/x)$.

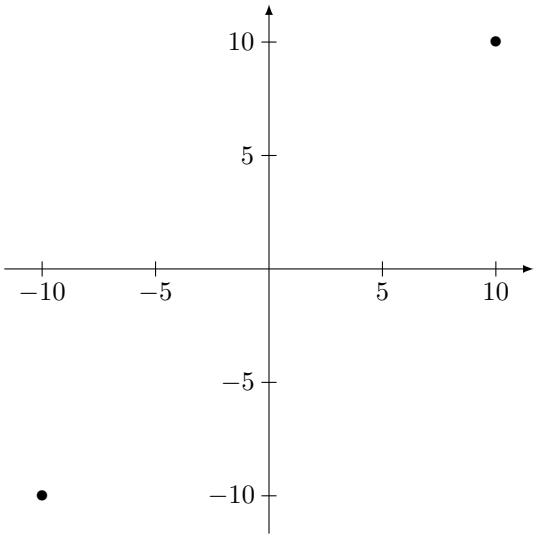


Picture `PVRFoobvAzpZTq`



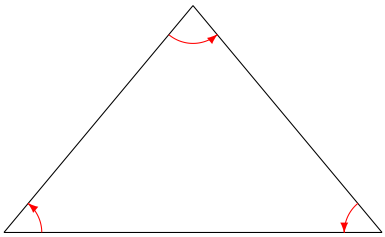
Comment : The marks 6 and 7 are well positioned

For the numbering on the axes with dilatation : `QIXEooejrojKjo`

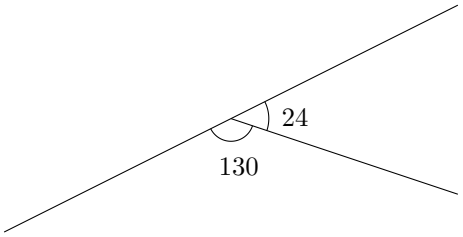


Comment : The numbering on the axes are not too far, not too close from the axis although there is a dilatation

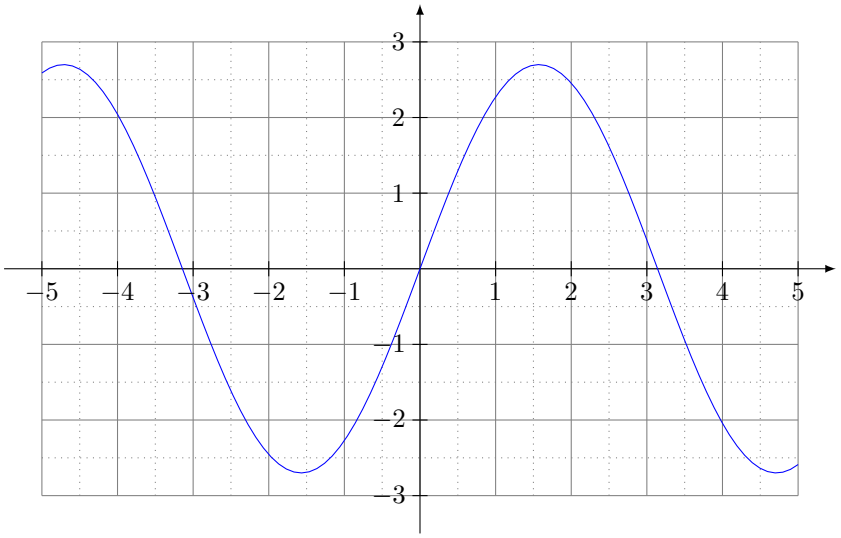
Picture : `WQVZooAhkdlegv`



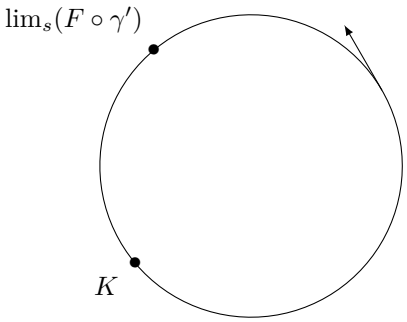
Comment : The angles are red and an arrow is drawn in the trigonometric sense.
Picture : `MJWWooEMdGoa`



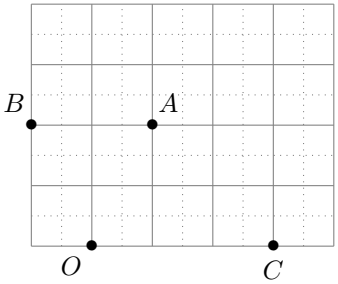
About axes and grid : `GGHOookMhIxqIK`



Comment : $x \mapsto 2.7\sin(x)$, the axes and the grid
This is a circle with a tangent vector and a mark :
Picture : TRJEooPRoLnEiG



Comment : A circle with a point and a mark : $\lim_s(F \circ \gamma')$ and on other point with the mark K
Picture `UREIooqNGBXtHg`

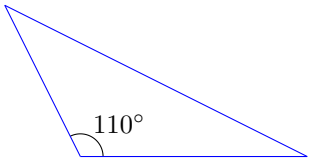


Comment :

1. The mark of the point A is on the line OA,
2. the mark on B on the line OB,

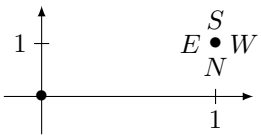
3. the mark on C is at angle -90 degree
4. and the one of O is at angle 225 degree

Picture `QIPRoolQCEnZdx`



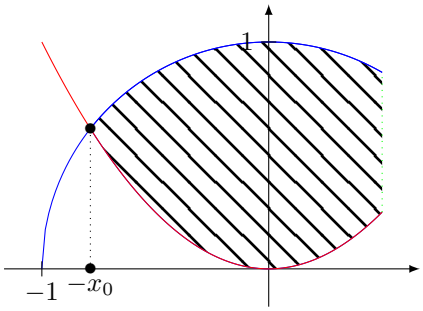
Comment : The angle at A has a mark 110 degree.

Picture `ASZLoocnIGlRHf`



Comment : The marks are positionned as written

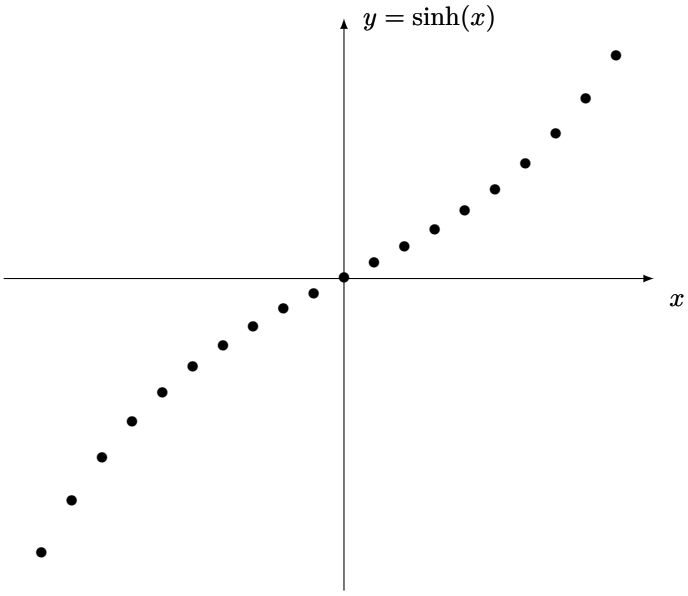
Picture `YJEDoojDtSeKHQ`



Comment :

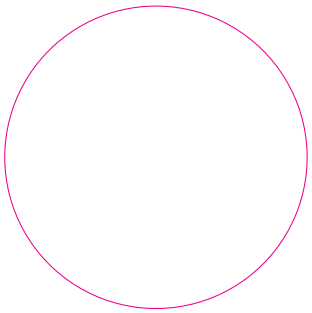
- one line in blue, one in red
- at the right : dotted green
- the surface is hatched in cyan

Picture `AxesSecond`



Comment : The marks on the axes : x and $y = \sinh(x)$.

Picture `exCircle`

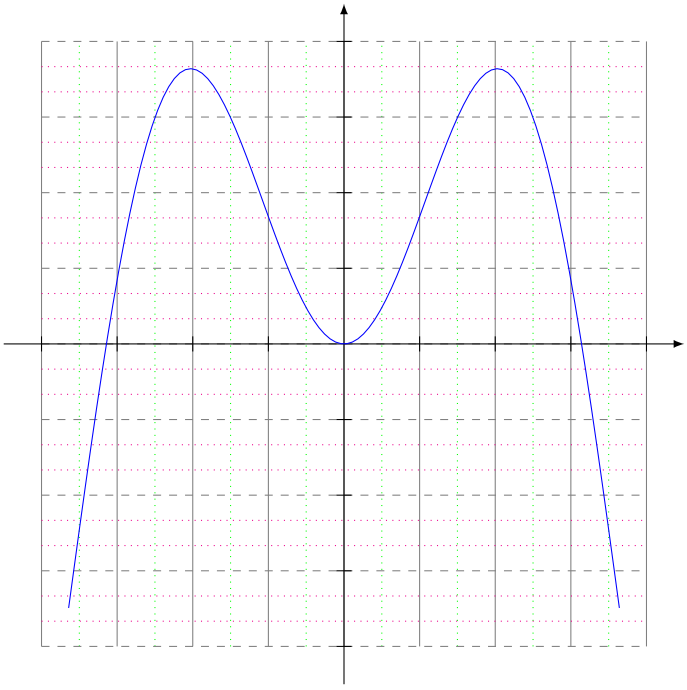


Comment : A magenta circle of radius 2

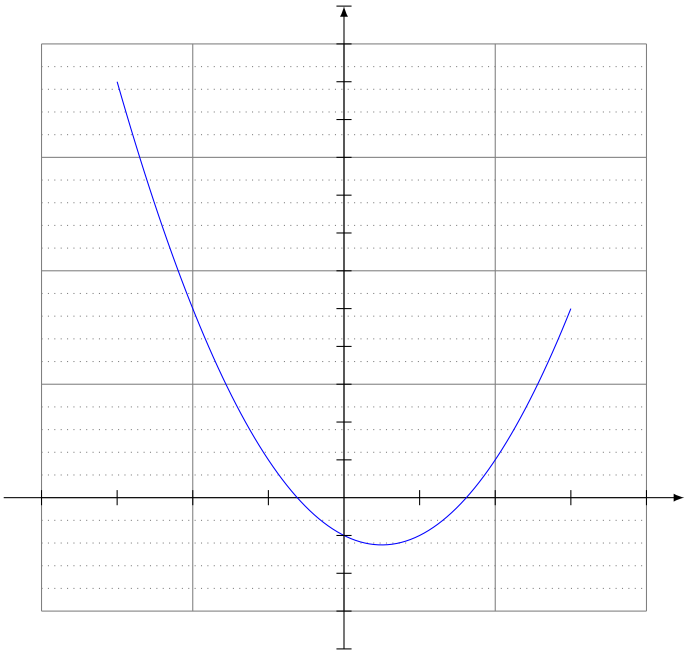
One red point :

Picture `OnePoint`

Picture `GridThree`



Picture `GridTwo`



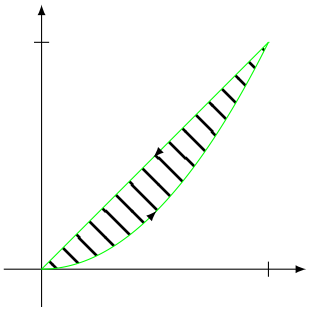
Picture `MarkOnPoint`

q ♢

çà

Comment : unicode in the mark : çà

File `QRJOooKZPUoLlF`



Comment : lines in green, one arrow in each sense and area hatched in grey.

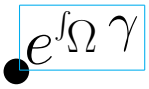
Sudoku grid.

	A	B	C	D	E	F	G	H	I
1		-3				0	3		-2
2	3							-1	
3			...			-2	...	1	
4	1		3	-1			...		
5	-4							-3	
6				-4	1		...		-1
7	...	...				...	2		...
8		1		...	...	...			...
9		2	-4		...	1		...	0

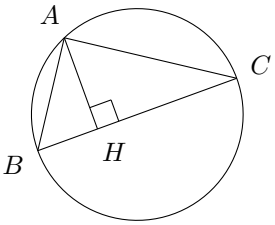
Comment : One sudoku grid with numbers from -4 to 4.

Multiple subfigures :

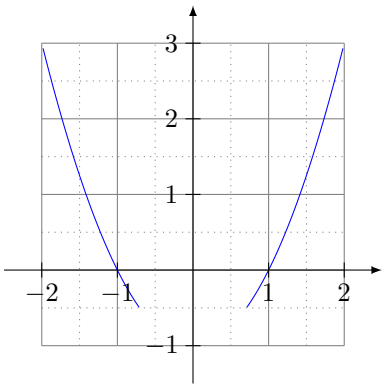
A point with a mark and its bounding box Picture `QRXCooUmnlhkvh`



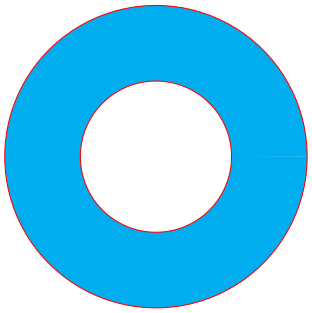
Comment : The bounding box of the text is drawn and its corner almost touches the point
Picture `ALAYooKKrRTkCG`



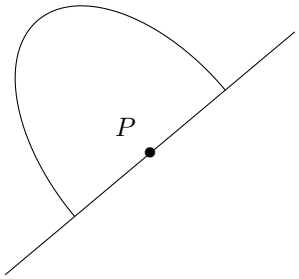
Comment : The right angle at H is correctly indicated.
Picture `PJKBooOhGVPkeR`



Comment : Le graphe de x^2-1 dans la boite xmin=-2,xmax=2,ymin=-0.5,ymax=3
Picture `LVPSoozFTyaeCG`



Comment : Une couronne
Picture `CUZFooGqZLaAEp`



Comment : A half-ellips is posed on the line and centered on the point P
Picture `JSYWooQYduLVLS`

Comment : A quarter of ellipse
Picture `LWVXooPyIlOKNd`

$$\begin{array}{c} \Delta_2(A) \\ \left(\begin{array}{|ccc} \lim_{x\to\infty} f(x) & B & C \\ (2,1) & \int_a^b & \sin(x) \\ (3,1) & \Delta_k(A_m) & \vdots \end{array}\right) \end{array}$$

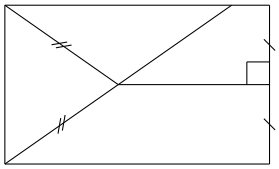
Comment : The matrix

$$\begin{pmatrix} \lim_{x\to\infty} f(x) & B & C \\ (2,1) & \int_a^b & \sin(x) \\ (3,1) & \Delta_k(A_m) & \vdots \end{pmatrix} \tag{1}$$

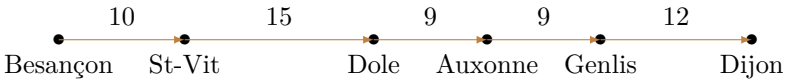
with

1. a box around each element
2. a red square around the 2x2 upper left square
3. $\Delta_2(A)$ over the latter red square

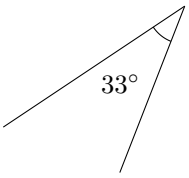
Picture : `SMXRooCnrlNw`



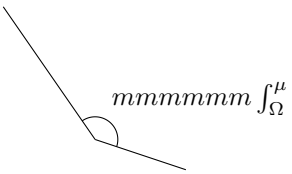
Picture : `EDEYRhQ`

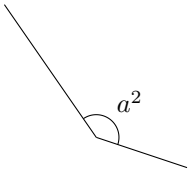


Comment : Les nombres arrivent au centre des vecteurs, et non au bout.
Picture : `VNJWooDeKdcy`

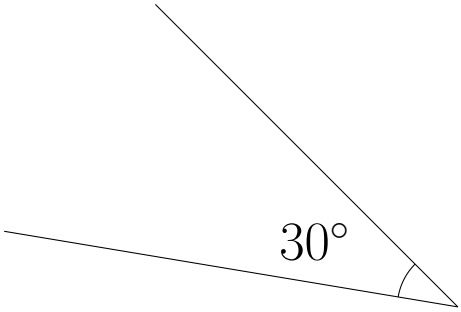


Picture : `VAAYooXndWQq`

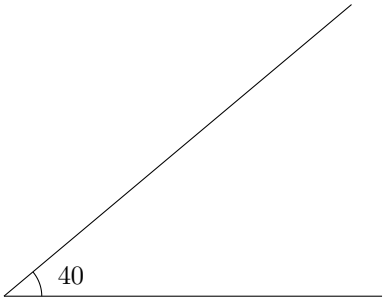

$mmmmmm \int_{\Omega}^{\mu}$


a^2

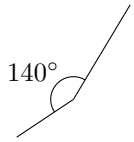
Picture : HUGKooTkDsOg



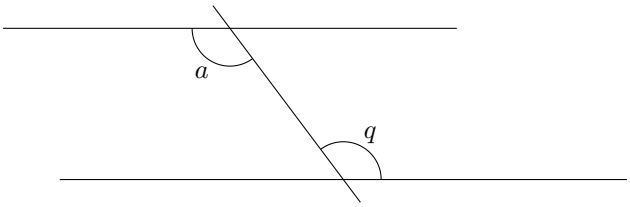
Picture : BQFUooTuMfnj



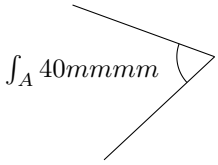
Picture : VRQCooOchjJA



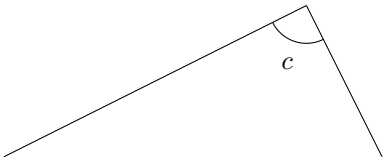
Picture : QEPZooNndwiS



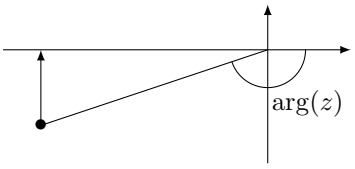
Picture : AEUYooWXYBuI



Picture : TBAGooZgekGa



Picture CWKJooppMsZXjw



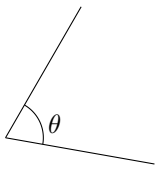
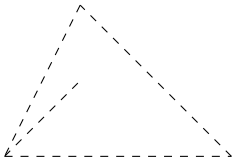
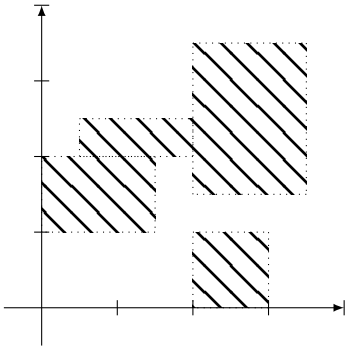


Figure 4: <+Type your caption here+>

Picture `AMDUooZZUOqa` The result is on figure 4.
Picture : `WWPPooTSxdXI`



Picture : `CNVAooybLqXmVS`



Comment : The rectangles are hatched and the edges are dotted.
Picture : `TKXZooLwXzjS`

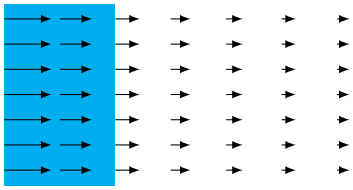
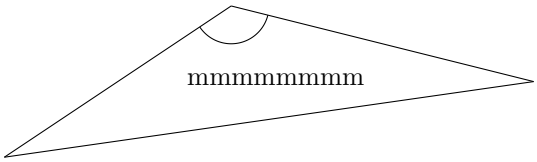
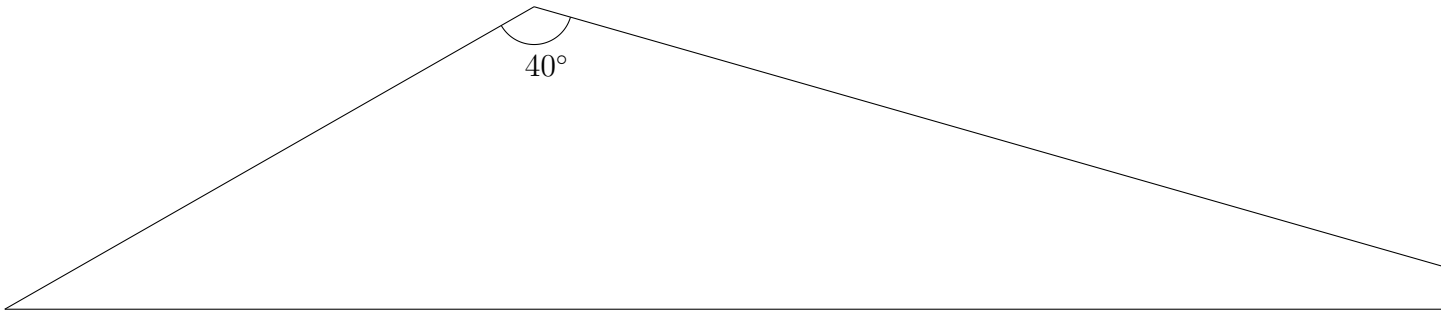


Figure 5: Le champ de vecteurs $F(x, y) = \frac{1}{x}(1, 0)$.

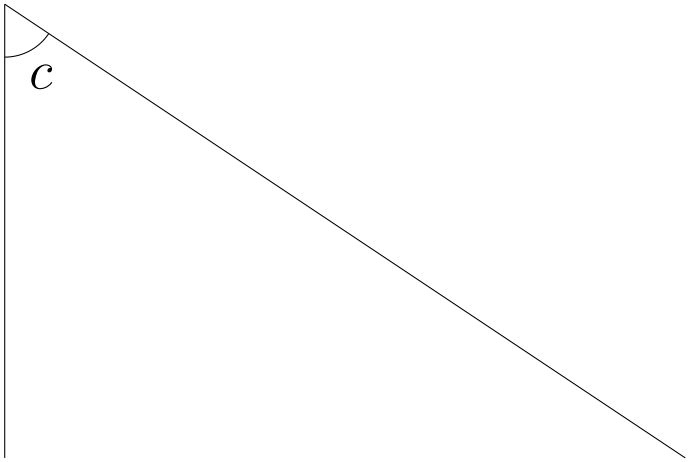
Picture : `XWWHooIkLOwZ`



Picture : `HRIVooBXxZES`



Picture : QWEHooSRqSdw



Picture QEFQoomlfmOQTM

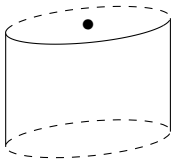
Comment : With the mark.

Comment : Without the mark.

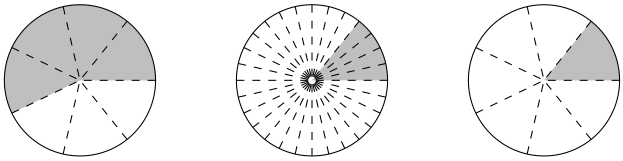
Comment : With the mark.

Picture `QHXKooHTpEuXMw`

Comment : The mark P is over the red line and under the cyan line.
Picture `OMZOoowEtRUuMi`



Comment : A cylinder is drawn. The above circle is half-dashed while the one on the basis is dashed.
Picture `XBAUooFtMWukKr`



1. Comment : A pie for 4/7
2. Comment : A pie for 4/28
3. Comment : A pie for 1/7

Picture `MXKAoozETwoiTe` The result is on figure 6.

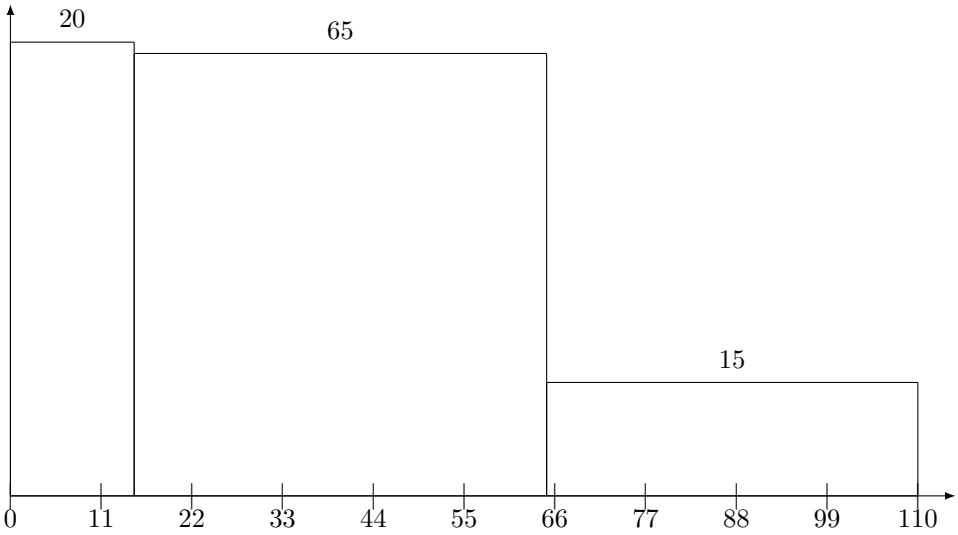
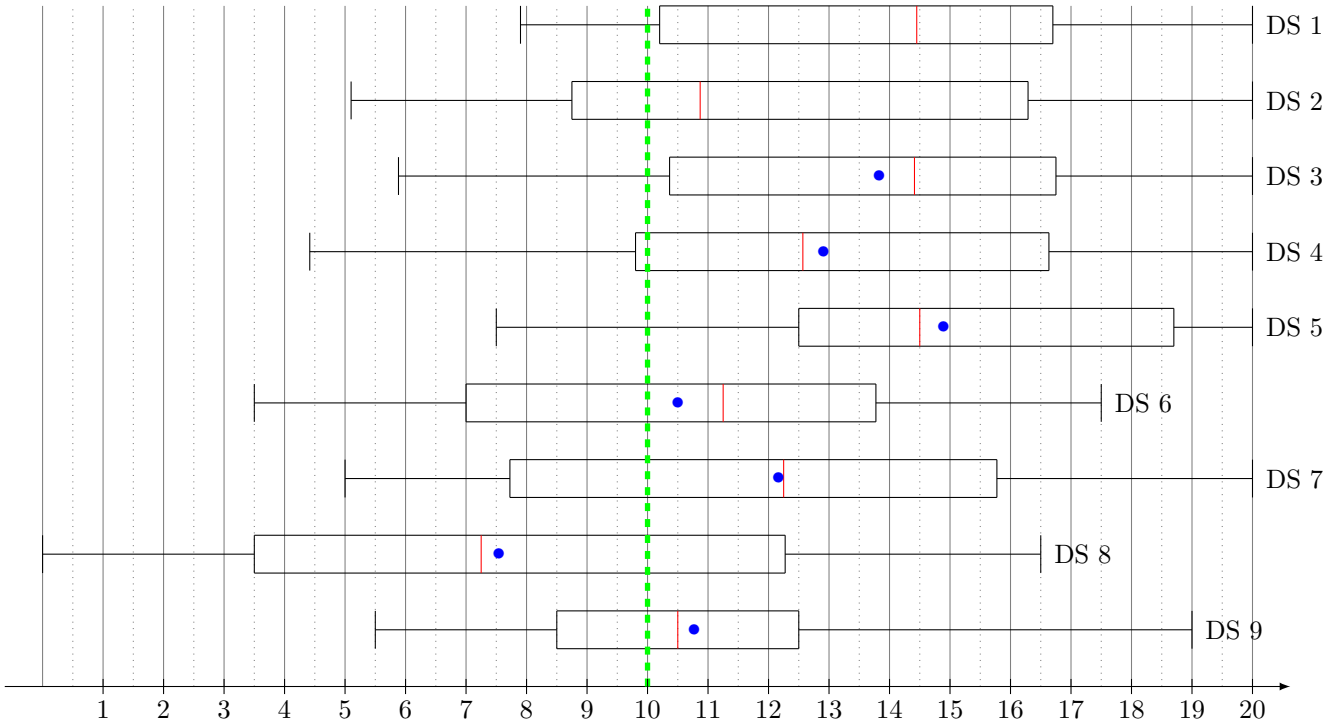
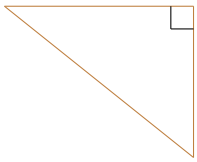


Figure 6: An histogram.

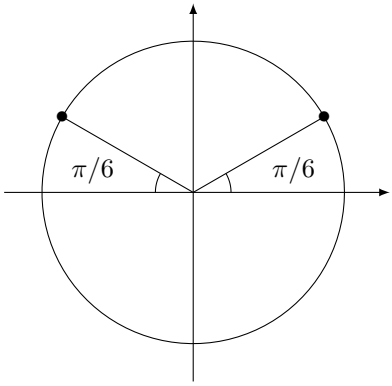
Comment : 3 boxes of height 20,65,15. These figures are written on the boxes.
Picture `AESIooxXxRYQdT`



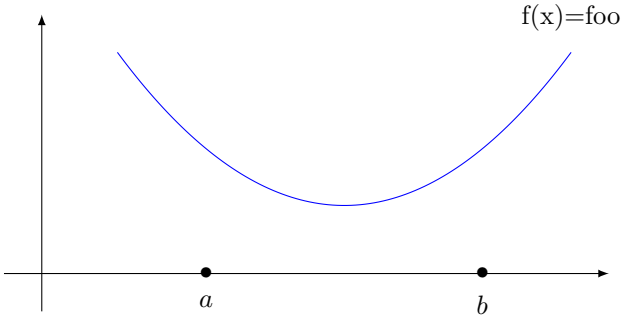
Comment : Box diagrams of student graduation
Picture `VLEGoolDFCdZDU`



Comment : A right angle is coded. And a brown triangle is drawn
Picture `DYJNooLVVFHEfN`



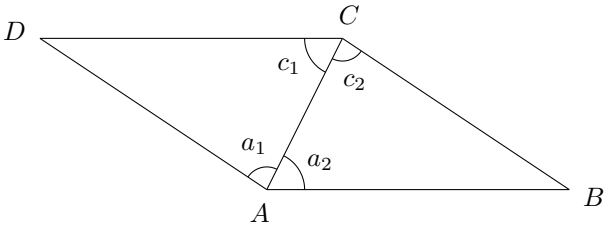
Comment : The two marks $\pi/6$ are correctly placed.
Picture `OYBTooNUcJLzDH`



Comment :

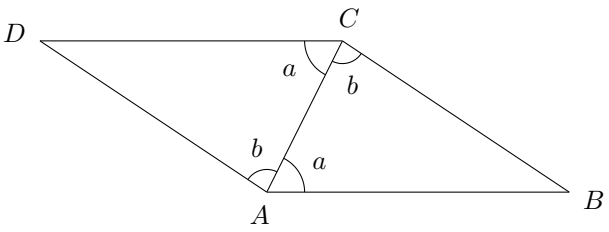
- Axes do not intersect because point (0,0) is not on the picture.
- Marks on points a and b well positioned.
- It is written «f(x)=foo» on the function.

Picture `OGGDooIvakwNlL`



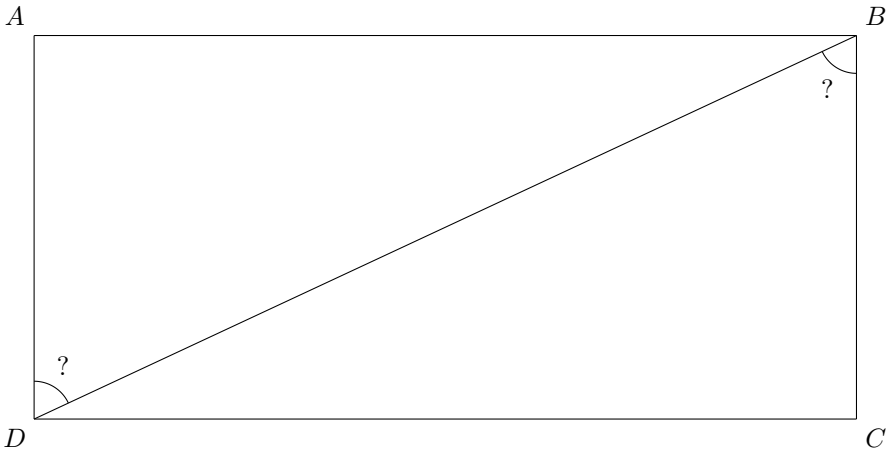
Comment : The marks are a_1, a_2, c_1, c_2

Picture `OGGDooIvakwNlL`

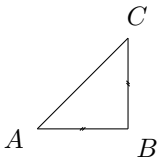


Comment : The marks are b, a, a, b

Picture `NWAEooQBLYYrpS` Comment : The angles are well circular, and the marks are correctly positioned.

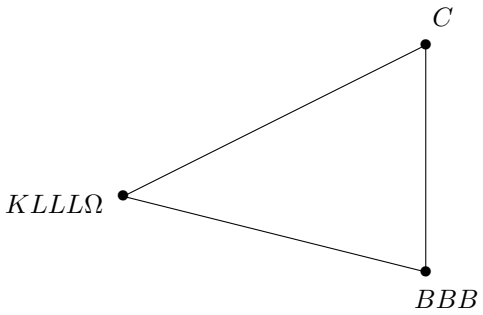


Picture `MBWHooeesXIrsz`



Comment : Vérifier la longueur des codages.

Picture : `ECQDooWEpuCM`



Picture : `CornetGlace`

The result is on figure 7.

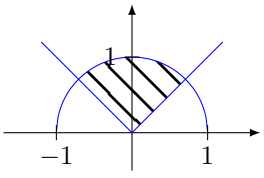
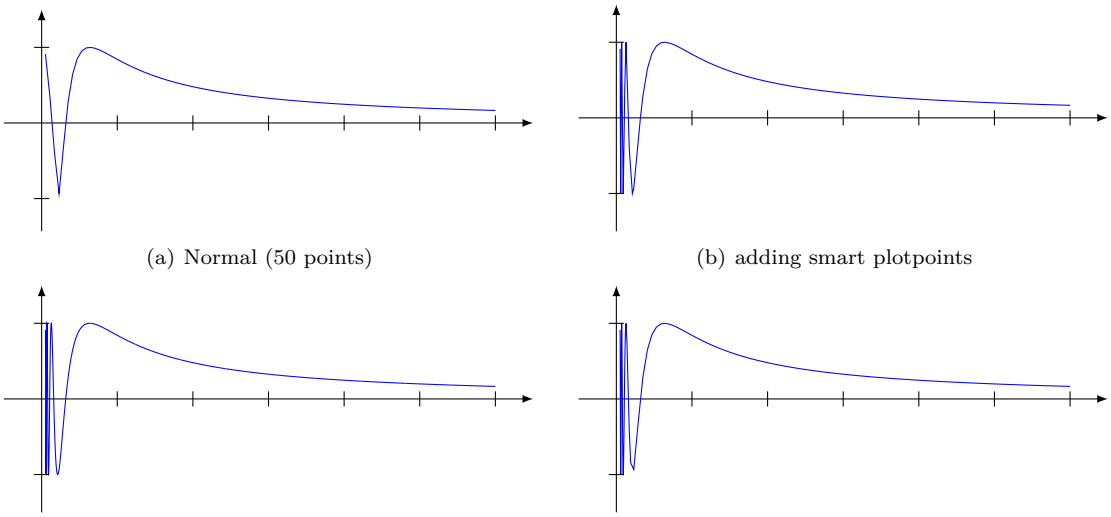


Figure 7: <+Type your caption here+>

About adding plotpoints : Picture `EXIIooJzzoJeai` on the figure 8.



(a) Normal (50 points)

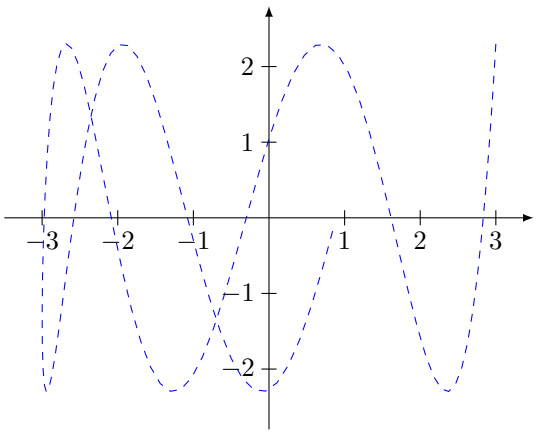
(b) adding smart plotpoints

(c) more points (5000)

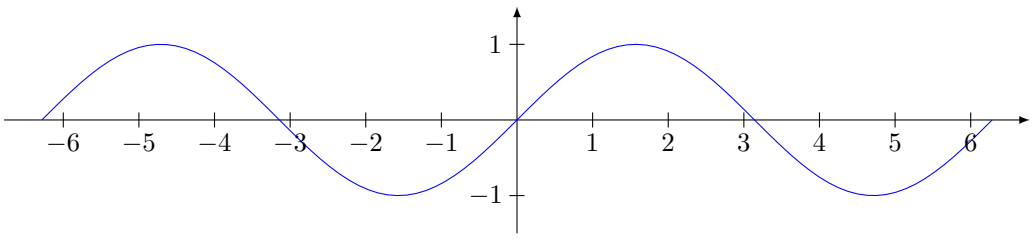
(d) with curvature plotpoints = 50

Figure 8: <+Type your caption here+>

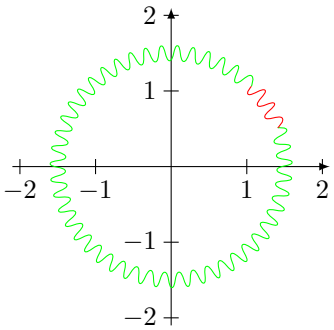
See also the subfigure 8(a) See also the subfigure 8(b) See also the subfigure 8(c)
Picture `ParametricOne`



Picture `FunctionFirst`

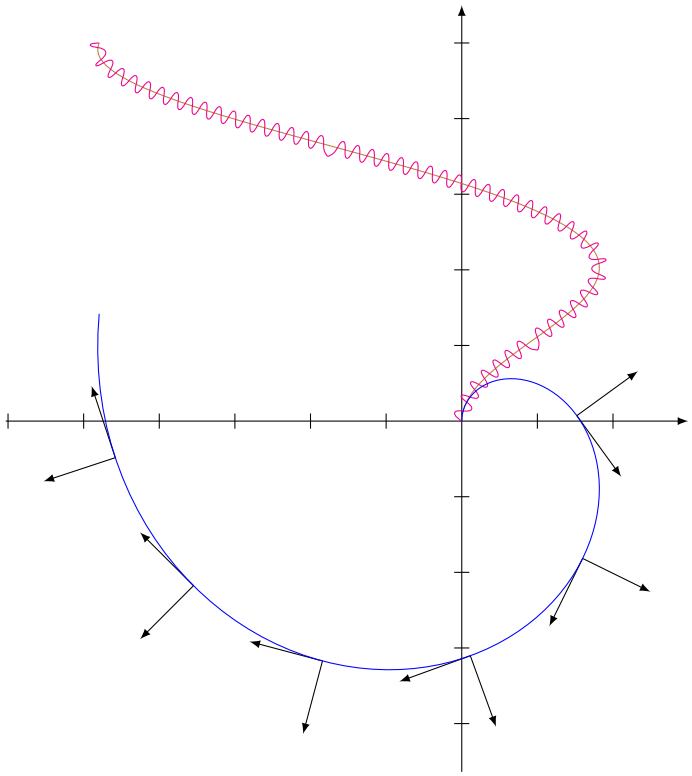


Picture `exCirclesThree`

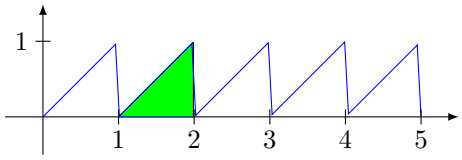


Comment : A large green wavy part and a small red wavy part.

File `ParametricTwo`

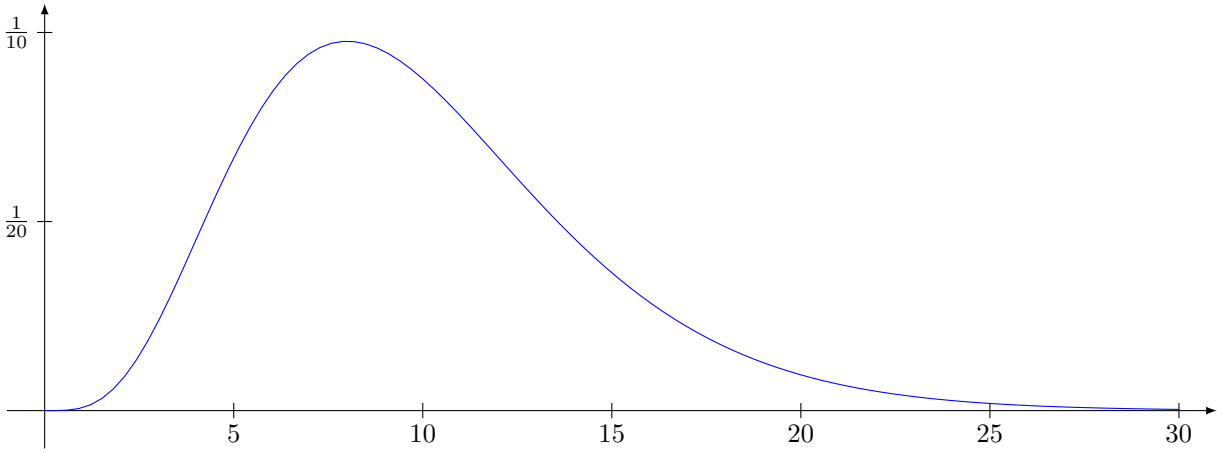


Picture `UARHooLMWqvyaI`



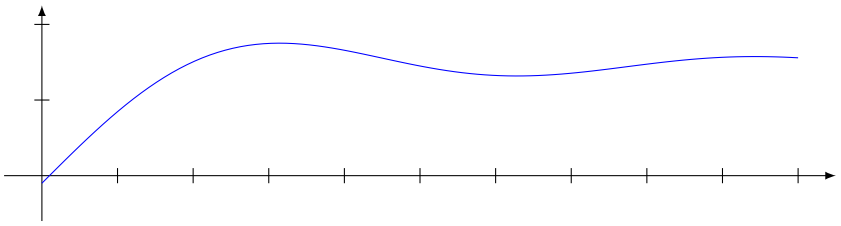
Comment : The mantisse function : f(x)=x-floor(x). On of the triangles is filled in green.

Picture `HUBEoofsPjXOQx`



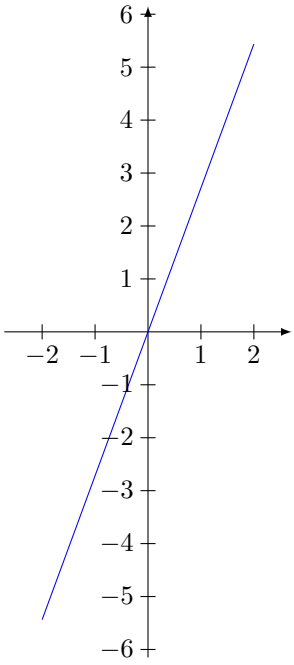
Comment : The χ^2 distribution.

Picture `HELQooLGapRQrr`

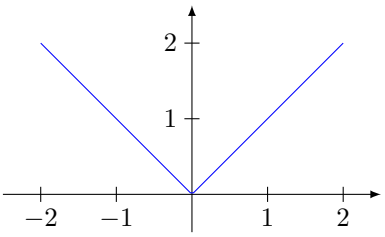


Comment : This is the graph of the function $x \mapsto \int_{0.1}^{x} \frac{\sin(t)}{t} dt$.

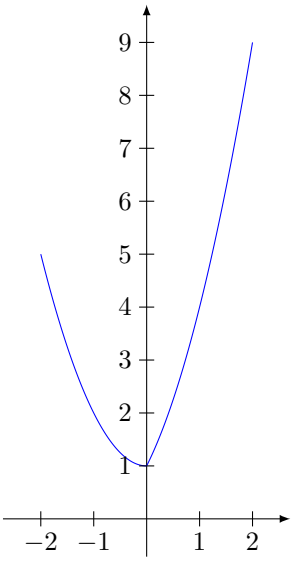
There are 4 subfigures at figure 9.



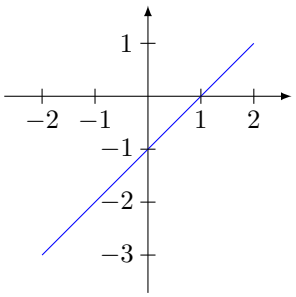
(a) La fonction $y = ex$



(b) La fonction $y = |x|$



(c) La fonction $y = x^2 + 1$ à gauche et $(x + 1)^2$ à droite.

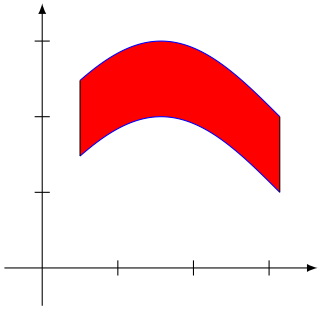


(d) La fonction $y = \log_2(2^{x-1})$

Figure 9: 4 subfigures still to be descripted.

Comment : Une figure multiple à détailler.

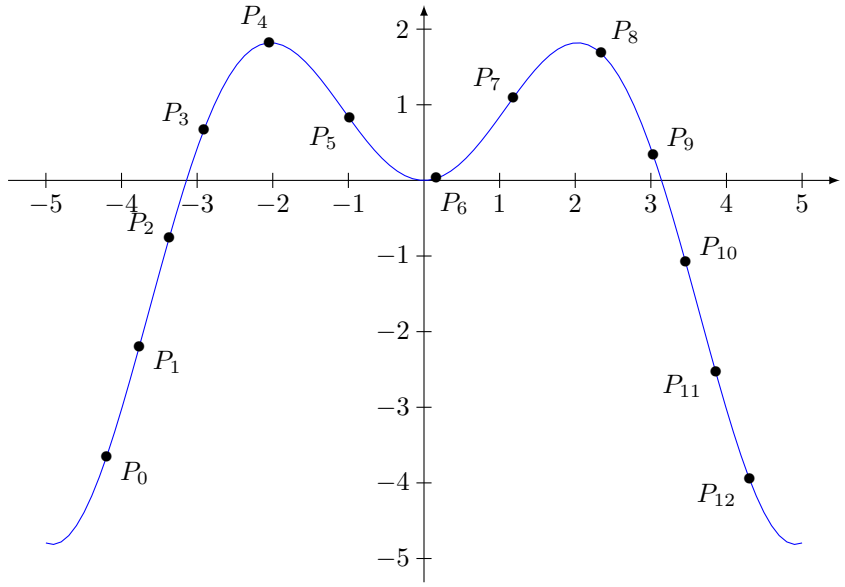
Picture `DEIToomZFknFmn`



Comment : The surface is filled in red, the curves are blue and the vertical segments are black.

Points and marks on a graph 1 :

Picture `FunctionFive`

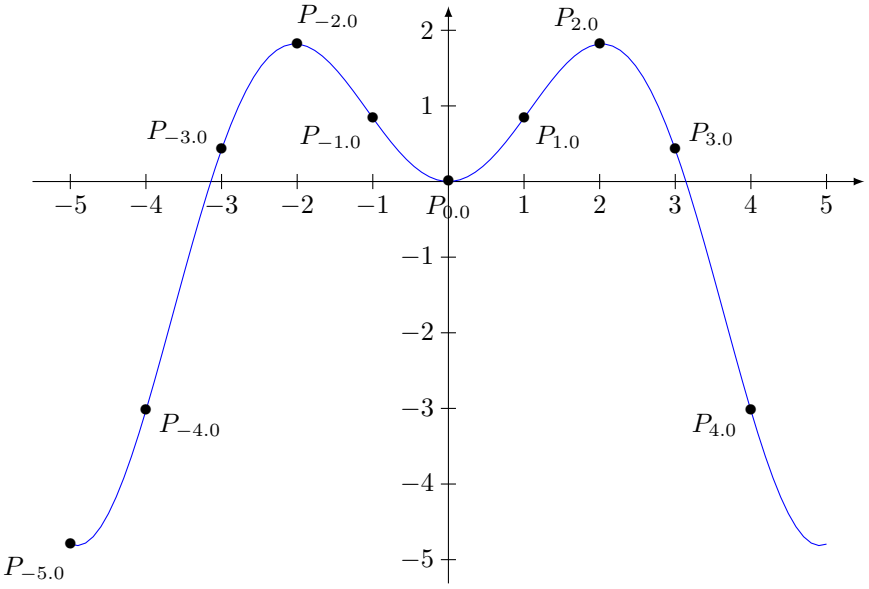


Comment :

- Points are regularly spaced with respect to the arc length
- Marks are on the exterior normal.

Points and marks on a graph 2 :

Picture `FunctionFour`



Comment : Points are regularly spaced with respect to abscisses.

Picture `FunctionSecond`

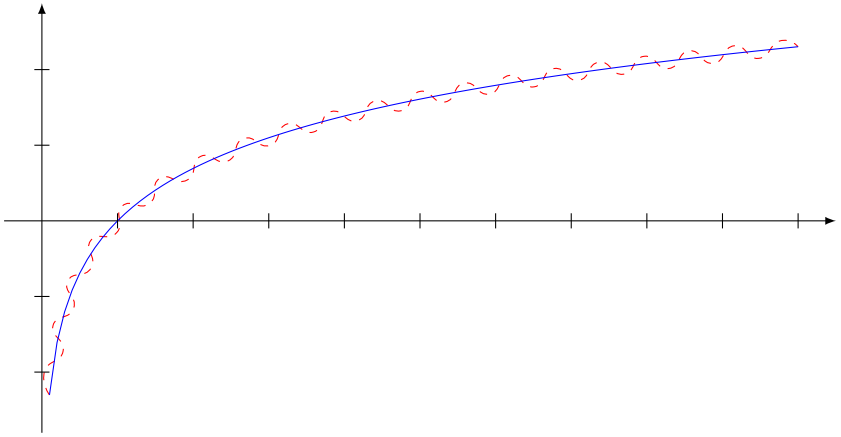
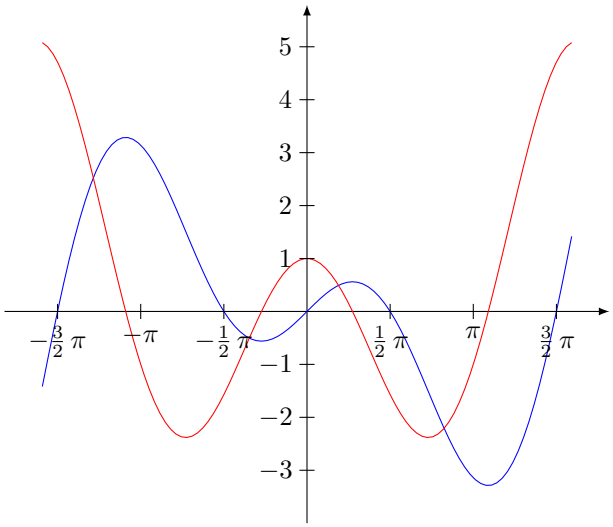


Figure `YOWDooyeyOJyml`



Comment : The axe is graduated with multiples of π