CHEATSHEET_EUCLIDE
Part II : drawing.
Conventions :
Options in [...] E for Euclide T for TikZ
A,B,C,... are names of points
a angle d length and r radius n number
☞ {} for new point () for coordinates or defined point

DRAWING
Points
\tkzDrawPoint[OT](A)
\tkzDrawPoints(A1,A2,...)

Segments and Lines
\tkzDrawSegment[ET](A,B)
dim= {label,d,T} and add= {n1 and n2}
\tkzDrawSegments[ET](A,B C,D ...)
\tkzDrawPolySeg[T](A,B,...)
\tkzDrawLine[E,T](A,B)
\tkzDrawLine[median,T](A,B,C)
\tkzDrawLine[altitude,T](A,B,C)
\tkzDrawLine[bisector,T](A,B,C)
\tkzDrawLines[T](A,B C,D ...)

Polygons
\tkzDrawPolygon[line style,T](A,B,C,...)

Circles
\tkzDrawCircle(A,B) center A through B
\tkzDrawCircle[R](A,n cm) center A radius n cm
\tkzDrawCircle[diameter](A,B) diameter AB

Sector
\tkzDrawSector[#1](#2,#3)(#4)
 towards,rotate,R , R with nodes

Arcs
arc choice : l,ll,lll
\tkzDrawArc[T](A,B)(C) or towards
\tkzDrawArc[rotate,T](A,B)(a)
\tkzDrawArc[R,T](A,r)(a,a')
\tkzDrawArc[angles,T](A,B)(a,a')
\tkzDrawArc[R with nodes,T](A,r)(B,C)
{\color{red}option : delta=n}
\tkzCompass[ET](A,B)
\tkzCompasss[ET](A,B C,D ...)

CLIPPING
\tkzClipOutCircle[radius or R](A,B)
\tkzClipCircle[radius or R](A,B)
\tkzClipPolygon(A,B,C,...)
\tkzClipOutPolygon(A,B,C,...)
\tkzClipSector[T](A,B)(C)

FILLING
\tkzFillPolygon[T](A,B,C,...)
\tkzFillCircle[T](A,B)
\tkzFillAngle[T](A,B,C)
\tkzFillAngles(A,B,C D,E,F ...)
\tkzFillSector[T](A,B)(C)
 towards rotate R

LABELLING

\tkzLabelPoint[T](A){$label$}
\tkzLabelPoints[T](#2)
\tkzAutoLabelPoints[center = A,dist= n](A,B,C,...)
\tkzLabelSegment[T](A,B){label}

```
\tkzLabelSegments[T](A,B,...)                                  projection= onto A--B
\tkzLabelRegPolygon[T,sep=1.1](O){A,B,...} center O            translation = from A to B
\tkzLabelCircle[T](A,B)(C){label}                              K length  ratio gap size
\tkzLabelAngle(A,B,C)
\tkzLabelAngles(A,B,C D,E,F ...)
```

SHOWING

```
\tkzShowLine[ET](A,B)  or (A,B,C)
 mediator
 perpendicular =through A}
 orthogonal     =  through A
 parallel      = through A
 bisector
          K=1
          gap   = 2,
          ratio = .5,
          length  = 1,
          size  = 1
```

```
\tkzShowTransformation[ET](A)
 reflection = over A--B
symmetry = center A
```