import turtle

from turtle import \*

import os

ho=turtle.Pen()

ve=turtle.Pen()

def repere():

 x,y=300,250

 ho.reset()

 ho.up()

 ve.up()

 ho.goto(-x,-y)

 ve.left(90)

 ve.goto(-x,-y)

 ho.down()

 ve.down()

 ho.goto(x,-y)

 ve.goto(-x,y)

 ho.up()

 ve.up()

def point(n,couleur):

 width(n)

 color(couleur)

 down()

 forward(1);backward(1)

 up()

def ecrireH(x,y,texte):

 up()

 goto(x-10-len(texte)/2,y-15)

 down()

 write(texte)

 up()

def ecrireV(x,y,texte):

 up()

 goto(x-15-len(texte),y-10)

 down()

 write(texte)

 up()

def graduations(n):

 pas=int(n/10)

 for k in range(0,11):

 ecrireH(k\*60-300,-250,str(k\*pas))

 for k in range(1,11):

 ecrireV(-300,k\*50-250,str(k/10))