# Enter your code here. Read input from STDIN. Print output to STDOUT

import math

import os

import sys

import random

import re

def fn(no):

digit=0

summ=0

fact=0

while(no!=0):

digit =no%10

fact=math.factorial(digit)

summ+=fact

no=no//10

return summ

def sfn(nnn):

dig =0

summm=0

num = fn(nnn)

while num!=0:

dig= num%10

summm+=dig

num=num//10

return summm

def sgi(kk):

gg = gi(kk)

d=0

sumgi=0

while gg!=0:

d = gg%10

sumgi+=d

gg=gg//10

return sumgi

def gi(nn):

g=0

s= sfn(nn)

sgi=0

totsum=0

i=0

while(sfn(i)!=nn):

i+=1

return i

#for i in range(0, until value of i for which the condition is satisfied):

#if(sfn(i)==nn):

#return i

def Calc(n1, m1):

totsum=0

for k in range (1, n1+1):

totsum+=sgi(k)

return totsum % m1

if \_name\_ == '\_main\_':

q = int(sys.stdin.readline())

for q\_itr in range(q):

nm= (sys.stdin.readline().split())

n = int(nm[0])

m = int(nm[1])

result = Calc(n, m)

sys.stdout.write(str(result) + '\n')