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10 MODE 1:INK 3,b:INK 2,20:BORDER 0:CLS:INK 2,2:PAPER 3
20 LOCATE 13,2:PRINT "Lucas' Problem":PAPER 0:FOR x=2 TO
37 STEP 4:FOR y=6 TO 8:LOCATE x+1,y:PRINT STRING$(3,14
3):NEXT y:LOCATE x+2,4:PRINT CHR$(49+(x\4)):NEXT:FOR a=
1 TO 4:a%(a)=1:a%(a+5)=2:NEXT
30 GOSUB 90:a=0:WHILE a=0:a$="":WHILE a$="":a$=UPPER$(I
NKEY$):NEND:a=VAL(a$):IF a$="0" THEN 80 ELSE WEND:c=a%(
a):IF c=0 THEN 30 ELSE IF c=2 THEN c=-1
40 IF a+c<1 OR a+c>9 THEN 30 ELSE IF a%(a+c)=0 THEN a%
(a+c)=a%(a):a%(a)=0
50 IF a+c+c<1 OR a+c+c>9 THEN 30 ELSE IF a%(a+c+c)=0 TH
EN a%(a+c-c)=a%(a):a%(a)=0
60 ok=-1:FOR b=0 TO 1:FOR a=1 TO 4:IF a%(a+(b+5))<>2-b
THEN ok=0
70 NEXT a,b:IF NOT(ok) THEN 30 ELSE GOSUB 90:LOCATE 15,
17:PRINT "Congratulations"
80 PEN 1:LOCATE 10,19:PRINT "Press any key to play":WHIL
E INKEY$="":WEND:RUN
90 FOR a=1 TO 9:x=143:IF a%(a)>0 THEN PEN a%(a)+1 ELSE
PEN 1
100 LOCATE a*4,7:PRINT CHR$(143):NEXT:PEN 1:RETURN

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