

```

100 REM === Dec TO Base ===
110 A:
120 INPUT "Decim. ?";Decim
130 GOSUB Dashes
140 PRINT "BASE "; base
150 GOSUB Dashes
160 PRINT "DEC.";Decim
170 LET Rank = 1
180 LET Number = 0
190 DO WHILE Q <> 0
200     LET Q = INT(Decim / base)
210     LET R = Decim - Q * base
220     LET Number = Number + R * Rank
230     LET Rank = Rank * 10
240     LET Decim = Q
250 LOOP
260 PRINT "Num."; Number
270 GOSUB Dashes
280 STOP
290 REM === Base to Dec ===
300 B:
310 INPUT "Number ?";Number
320 GOSUB Dashes
330 PRINT "BASE "; base
340 GOSUB Dashes
350 PRINT "Num.";Number
360 LET Rank = 10
370 LET Number = Number / 10 ^ Rank
380 LET Decim = 0
390 DO WHILE Rank <> 0
400     LET Q = INT(Number * 10)
410     LET Number = Number * 10 - Q
420     LET C = Rank - 1
430     LET R = Q * base ^ C
440     LET Decim = Decim + R
450     LET Rank = Rank - 1
460 LOOP
470 PRINT "DEC.";Decim
480 GOSUB Dashes
490 STOP
500 E:
510 INPUT "Base ?"; base
520 IF base > 9 GOTO E
530 IF base < 2 GOTO E
540 PRINT
550 STOP
560 Dashes:
570 PRINT "-----"
580 RETURN
590 END

```

