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PPPPPPP RRRRRRR 000000 BBBB BBBB 44 44
PPPPPPP RRRRRRR 000000 BBBB BBBB 44 44
PP PP RR RR 00 00 BB BB 44 44
PP PP RR RR 00 00 BB BB 44 44
PP PP RR RR 00 00 BB BB 44 44
PP PP RR RR 00 00 BB BB 44 44
PPPPPPP RRRRRRR 00 00 BBBB BBBB 4444444444
PPPPPPP RRRRRRR 00 00 BBBB BBBB 4444444444
PP RR RR 00 00 BB BB 44
PP RR RR 00 00 BB BB 44
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PP RR RR 000000 BBBB BBBB 44
PP RR RR 000000 BBBB BBBB 44

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44 44 000000 000000 44 44 000000 5555555555
44 44 000000 000000 44 44 000000 5555555555
44 44 00 00 00 00 44 44 00 00 55
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44 44 00 0000 00 0000 44 44 00 0000 555555
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44 0000 00 0000 00 44 0000 00 55
44 0000 00 0000 00 44 0000 00 55
44 00 00 00 00 44 00 00 55 55
44 00 00 00 00 44 00 00 55 55
44 000000 000000 44 000000 555555
44 000000 000000 44 000000 555555

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BBBB U U N N DDDD Y Y AAA
B B U U N N D D Y Y A A
B B U U NN N D D Y Y A A
BBBB U U N N N D D Y A A
B B U U N NN D D Y A A A A
B B U U N N D D Y A A
BBBB UUUUU N N DDDD Y A A

```

LPTSPL VERSION 6(344) RUNNING ON LPT500
START USER BUNDY A [400,405] JOB PROB3 SEQ. 3403 DATE 20-NOV-75 10:27:18 MONITOR NETMON 5.07B V3 (AUG 12 T *START*
REQUEST CREATED: 20-NOV-75 10:26:12
FILE: DSKA1:PROB4[400,422] CREATED: 19-NOV-75 12:06:00 <155> PRINTED: 20-NOV-75 10:28:12
QUEUE SWITCHES: /PRINT:ARROW /FILE:ASCII /COPIES:1 /SPACING:1 /LIMIT:24 /FORMS:NORMAL

*****.
* PROB4.
* PROLOG ELECTRIC TRAIN PROBLEM, P20,N011.
* STAGE 5.
* G LUGER NOV 1975.
*****.

+TFLAG.

+GIVEN(NIL).

+STANDSYS(SYS).

+STANDUNIT(L,FT,SYS) -/.

+STANDUNIT(T,MINS,SYS) -/.

+STANDUNIT(*U,*U,*SYS) -ISCONST(*U) -/.

+STANDUNIT(*D,*U,*SYS) -UNIV(*D,*S,*ARGS)
-LSTANDUNIT(*ARGS,*UARGS,*SYS) -UNIV(*U,*S,*UARGS).

+LSTANDUNIT(NIL,NIL,*SYS).

+LSTANDUNIT(*D.*DL,*U.*UL,*SYS) -STANDUNIT(*D,*U,*SYS)
-LSTANDUNIT(*DL,*UL,*SYS).

+SEGMENT(EPISODE,PERIOD1,PERIOD2,PERIOD3,NIL).

+PERIOD(PERIOD1).

+PERIOD(PERIOD2).

+PERIOD(PERIOD3).

+PERIOD(EPISODE).

+DURATION(PERIOD1,TI1).

+DURATION(PERIOD2,TI2).

+DURATION(PERIOD3,TI3).

+DURATION(EPISODE,TI0).

+INITIAL (PERIOD1, DEPARTURE).
+INITIAL (PERIOD2, CHANGE1).
+INITIAL (PERIOD3, CHANGE2).
+INITIAL (EPISODE, DEPARTURE).
+FINAL (PERIOD1, CHANGE1).
+FINAL (PERIOD2, CHANGE2).
+FINAL (PERIOD3, ARRIVAL).
+FINAL (EPISODE, ARRIVAL).
+MOMENT (DEPARTURE).
+MOMENT (CHANGE1).
+MOMENT (CHANGE2).
+MOMENT (ARRIVAL).

+DISTANCE (TRAIN, D1, PERIOD1).
+DISTANCE (TRAIN, D2, PERIOD2).
+DISTANCE (TRAIN, D3, PERIOD3).
+DISTANCE (TRAIN, D0, EPISODE).

+VEL (TRAIN, ZERO, DEPARTURE).
+VEL (TRAIN, ZERO, ARRIVAL).
+VEL (TRAIN, V, PERIOD2).
+VEL (TRAIN, V, CHANGE1).
+VEL (TRAIN, V, CHANGE2).

+ACCEL (TRAIN, A1, PERIOD1).
+ACCEL (TRAIN, ZERO, PERIOD2).
+ACCEL (TRAIN, A3, PERIOD3).

+MEASURE (ZERO, 0).
+MEASURE (T11, T1).

+MEASURE(TI2,T2).
+MEASURE(TI3,T3).
+MEASURE(TI0,3).
+MEASURE(D1,X1).
+MEASURE(D2,X2).
+MEASURE(D3,X3).
+MEASURE(D0,2000).
+MEASURE(A1,3/2).
+MEASURE(A3,-5/2).
+MEASURE(V,Z).

+CONST(Z).

+UNIT(ZERO,*W).
+UNIT(TI1,SECS).
+UNIT(TI2,SECS).
+UNIT(TI3,SECS).
+UNIT(TI0,MINS).
+UNIT(D1,FT).
+UNIT(D2,FT).
+UNIT(D3,FT).
+UNIT(D0,YDS).
+UNIT(A1,FT/SECS:2).
+UNIT(A3,FT/SECS:2).
+UNIT(V,FT/SECS).

+DIRECTION(ZERO,*U,*V).
+DIRECTION(V,0,0).
+DIRECTION(A1,0,0).

+DIRECTION(A3,0,0).

+GO -FIND(V.NIL,*ANS).

+FIN.