Answer on Question #53655, Engineering / Other

Task: A system contains the following periodic tasks: T1 = (5, 1), T2 = (7, 1, 9), T3 = (10, 3), and T4 = (35, 7).

a. If the first frame size constraint is ignored, what are the possible frame sizes?

Answer:

1. $f \geq \max(e_i), 1 \leq i \leq n$

This step is ignored, here.

2. f divides at least one of the periods evenly:

$f \in \{2, 5, 7, 10, 14, 35\}$

3. $2f - gdc(f, p_i) \leq D_i, 1 \leq i \leq n$

Pi	Di	f = 2	f = 5	f = 7	f = 10	f = 14	f = 35
5	5	3	5	13(x)	15(x)	27(x)	65(x)
7	9	3	9	7	19(x)	21(x)	63(x)
10	10	2	5	13(x)	10	26(x)	65(x)
35	35	3	5	7	15	20	35(x)