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1a) $\frac{7}{12} = \frac{1}{2} + \frac{1}{12}$

each diner get half a pizza then $\frac{1}{12}$ of a pizza

1b) $\frac{7}{12} = \frac{1}{3} + \frac{1}{4}$

each diner gets $\frac{1}{3}$ of a pizza and $\frac{1}{4}$ of a pizza.
It's better because $\frac{1}{3}$ and $\frac{1}{4}$ are closer to each other than $\frac{1}{2}$ and $\frac{1}{12}$

2. $n \equiv 1 \pmod{3}$

$n \equiv 2 \pmod{5}$

b_i	N_i	x_i	$b_i N_i x_i$	Σ
1	5	2	10	22
2	3	2	12	

$5x \equiv 1 \pmod{3}$

$3x \equiv 1 \pmod{5}$

$n = 22 + 15k$

Smallest $n = 7$