Ispitivanjem “grubom silom” lako dolazimo do sljedeće rastave navedenih brojeva na proste faktore:

$$4840 = 2^3 \cdot 5 \cdot 11^2$$
$$1188 = 2^2 \cdot 3^3 \cdot 11$$
$$4004 = 2^2 \cdot 7 \cdot 11 \cdot 13$$
$$2992 = 2^4 \cdot 11 \cdot 17$$

Odavde slijedi:

$$\mathrm{NZD}(4840, 1188, 4004, 2992) = 2^2 \cdot 11 = 44$$
$$\mathrm{NZS}(4840, 1188, 4004, 2992) = 2^4 \cdot 3^3 \cdot 5 \cdot 7 \cdot 11^2 \cdot 13 \cdot 17 = 404323920$$

S druge strane, primjenom Euklidovog algoritma za računanje NZD dobijamo:

$$\mathrm{NZD}(4840, 1188) = \mathrm{NZD}(1188, \mathrm{mod}(4840, 1188)) = \mathrm{NZD}(1188, 88) =$$
$$= \mathrm{NZD}(88, \mathrm{mod}(1188, 88)) = \mathrm{NZD}(88, 44) = \mathrm{NZD}(44, \mathrm{mod}(88, 44)) = \mathrm{NZD}(44, 0) = 44$$

$$\mathrm{NZD}(4840, 1188, 4004) = \mathrm{NZD}(\mathrm{NZD}(4840, 1188), 4004) = \mathrm{NZD}(44, 4004) =$$
$$= \mathrm{NZD}(44, \mathrm{mod}(4004, 44)) = \mathrm{NZD}(44, 0) = 44$$

$$\mathrm{NZD}(4840, 1188, 4004, 2992) = \mathrm{NZD}(\mathrm{NZD}(4840, 1188, 4004), 2992) = \mathrm{NZD}(44, 2992) =$$
$$= \mathrm{NZD}(44, \mathrm{mod}(2992, 44)) = \mathrm{NZD}(44, 0) = 44$$

Ovim smo potvrdili da je $\mathrm{NZD}(4840, 1188, 4004, 2992) = 44$.

Za računanje NZS dobijamo:

$$\mathrm{NZS}(4840, 1188) = 4840 \cdot 1188 / \mathrm{NZD}(4840, 1188) = 5749920 / 44 = 130680$$

$$\mathrm{NZD}(130680, 4004) = \mathrm{NZD}(4004, \mathrm{mod}(130680, 4004)) = \mathrm{NZD}(4004, 2552) =$$
$$= \mathrm{NZD}(2552, \mathrm{mod}(4004, 2552)) = \mathrm{NZD}(2552, 1452) = \mathrm{NZD}(1452, \mathrm{mod}(2552, 1452)) =$$
$$= \mathrm{NZD}(1452, 1100) = \mathrm{NZD}(1100, \mathrm{mod}(1452, 1100)) = \mathrm{NZD}(1100, 352) =$$
$$= \mathrm{NZD}(352, \mathrm{mod}(1100, 352)) = \mathrm{NZD}(352, 44) = \mathrm{NZD}(44, \mathrm{mod}(352, 44)) = \mathrm{NZD}(44, 0) = 44$$

$$\mathrm{NZS}(4840, 1188, 4004) = \mathrm{NZS}(\mathrm{NZS}(4840, 1188), 4004) = \mathrm{NZS}(130680, 4004) =$$
$$= 130680 \cdot 4004 / \mathrm{NZS}(130680, 4004) = 130680 \cdot (4004 / 44) = 130680 \cdot 91 = 11891880$$

$$\mathrm{NZD}(11891880, 2992) = \mathrm{NZD}(2992, \mathrm{mod}(11891880, 2992)) = \mathrm{NZD}(2992, 1672) =$$
$$= \mathrm{NZD}(1672, \mathrm{mod}(2992, 1672)) = \mathrm{NZD}(1672, 1320) = \mathrm{NZD}(1320, \mathrm{mod}(1672, 1320)) =$$
$$= \mathrm{NZD}(1320, 352) = \mathrm{NZD}(352, \mathrm{mod}(1320, 352)) = \mathrm{NZD}(352, 264) =$$
$$= \mathrm{NZD}(264, \mathrm{mod}(352, 264)) = \mathrm{NZD}(264, 88) = \mathrm{NZD}(88, \mathrm{mod}(264, 88)) = \mathrm{NZD}(88, 0) = 88$$

$$\mathrm{NZS}(4840, 1188, 4004, 2992) = \mathrm{NZS}(\mathrm{NZS}(4840, 1188, 4004), 2992) = \mathrm{NZS}(11891880, 2992) =$$
$$= 11891880 \cdot 2992 / \mathrm{NZD}(11891880, 2992) = 11891880 \cdot (2992 / 88) = 11891880 \cdot 34 =$$
$$= 404323920$$

Ovim smo potvrdili da je $\mathrm{NZS}(4840, 1188, 4004, 2992) = 404323920$.

Napomena: U ovom primjeru ima zaista dosta računanja i do rješenja se dolazi mnogo brže korištenjem rastave na proste faktore nego Euklidovim algoritmom. Zaista, ukoliko je poznata rastava svih argumenata na proste faktore, naivni metod koji se zasniva na rastavi na proste faktore brzo dovodi do rješenja. Međutim, u općem slučaju, izvršiti rastavu argumenata na proste faktore može biti vrlo komplicirano, a Euklidov algoritam ne traži takvu rastavu.