

## Single machine problems

- **maximal polynomially solvable:**

$1 prec; r_i C_{max}$	Lawler (1973) [10]
$1 prec; p_i = p; r_i L_{max}$	Simons (1978) [20]
$1 prec; r_i; pmtn L_{max}$	Blazewicz (1976) [6], Baker et al. (1983) [2]
$1 prec; p_i = p; r_i \sum C_i$	Simons (1983) [21]
$1 prec; pmtn; p_i = p; r_i \sum C_i$	Baptiste et al. (2004) [5]
$1 r_i; pmtn \sum C_i$	Baker (1974) [1]
$1 p_i = p; r_i \sum w_i C_i$	Baptiste (2000) [4]
$1 sp - graph \sum w_i C_i$	Lawler (1978) [12]
$1 r_i; pmtn \sum U_i$	Lawler (1990) [13]
$1 p_i = p; r_i \sum w_i U_i$	Baptiste (1999) [3]
$1 pmtn; p_i = p; r_i \sum w_i U_i$	Baptiste (1999) [3]
$1 p_i = p; r_i \sum T_i$	Baptiste (2000) [4]
$1 pmtn; p_i = p; r_i \sum T_i$	Tian et al. (2006) [22]
$1 p_i = 1; r_i \sum w_i T_i$	Assignment-problem

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- **maximal pseudopolynomially solvable:**

$1 r_i; pmtn \sum w_i U_i$	Lawler (1990) [13]
$1 \sum T_i$	Lawler (1977) [11], Du & Leung (1990) [7]

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- **minimal NP-hard:**

* $1 r_i L_{max}$	Lenstra et al. (1977) [18]
* $1 chains; r_i; pmtn \sum C_i$	Lenstra (-) [15]
* $1 prec \sum C_i$	Lawler (1978) [12], Lenstra & Rinnooy Kan (1978) [16]
* $1 r_i \sum C_i$	Lenstra et al. (1977) [18]
* $1 chains; p_i = 1; r_i \sum w_i C_i$	Lenstra & Rinnooy Kan (1980) [17]
* $1 prec; p_i = 1 \sum w_i C_i$	Lawler (1978) [12], Lenstra & Rinnooy Kan (1978) [16]
* $1 r_i; pmtn \sum w_i C_i$	Labetoulle et al. (1984) [9]
* $1 chains; p_i = 1 \sum U_i$	Lenstra & Rinnooy Kan (1980) [17]
$1 \sum w_i U_i$	Lawler & Moore (1969) [14], Karp (1972) [8]
$1 \sum T_i$	Lawler (1977) [11], Du & Leung (1990) [7]
* $1 chains; p_i = 1 \sum T_i$	Leung & Young (1990) [19]
* $1 \sum w_i T_i$	Lawler (1977) [11], Lenstra et al. (1977) [18]

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- **minimal open:**

$1 pmtn; p_i = p; r_i \sum w_i C_i$
$1 p_i = p; r_i \sum w_i T_i$

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- **maximal open:**

$1 p_i = p; r_i \sum w_i T_i$
$1 pmtn; p_i = p; r_i \sum w_i T_i$

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