Oil blending

A refinery has to blend 4 types of oil to obtain 3 types of gasoline. The following table reports the available quantity of oil of each type (in barrels) and the respective unit cost (Euro per barrel)

Oil type	Availability	Cost
1	5000	9
2	2400	7
3	4000	12
4	1500	6

Blending constraints are to be taken into account, since each type of gasoline must contain at least a specific, predefined, quantity of each type of oil, as indicated in the next table. The unit revenue of each type of gasoline (Euro per barrel) is also indicated

Gasoline type	Requirements	Revenue
A	$\geq 20\%$ of type 2	12
	$\leq 30\%$ of type 3	
B	$\geq 40\%$ of type 3	18
C	$\leq 50\%$ of type 2	10

Give a linear programming formulation for the problem of maximizing the revenue. Formulate it with AMPL and solve it with CPLEX.