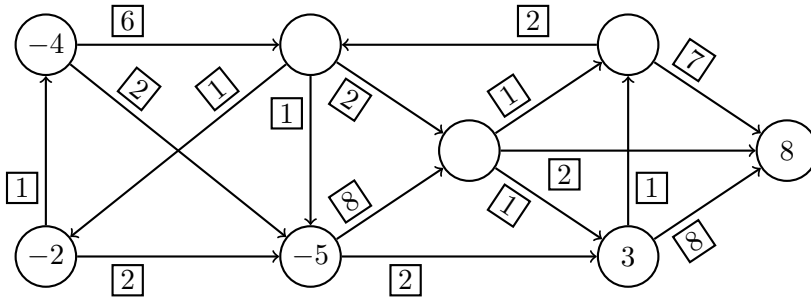
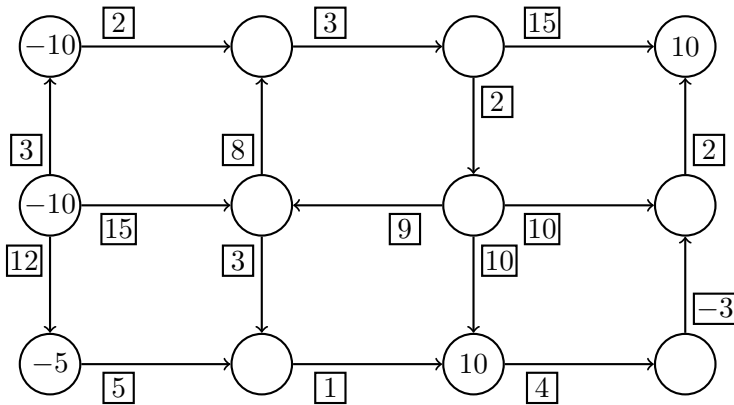


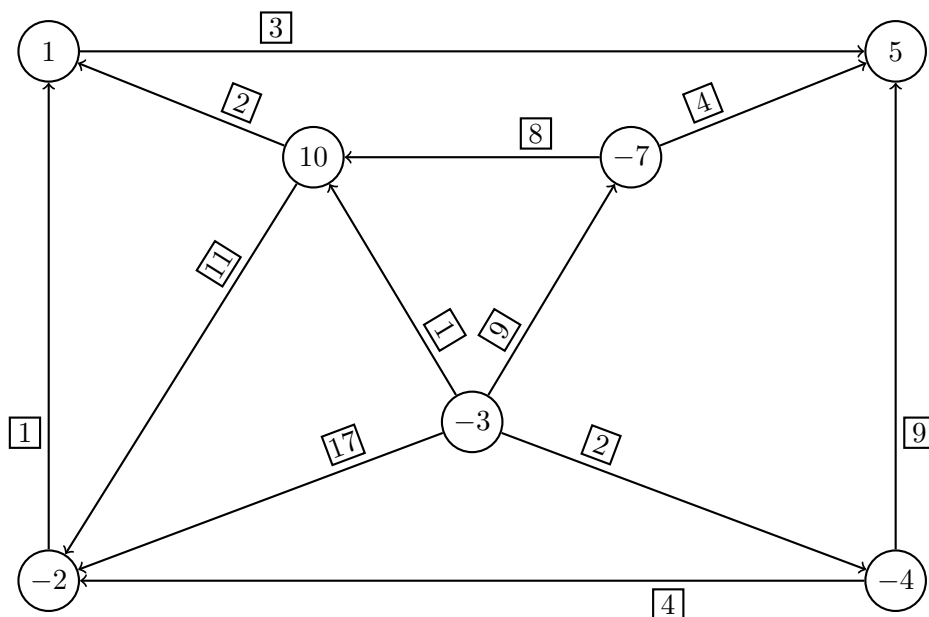
1. Reši problem razvoza na grafu s simpleksno metodo za omrežje.



2. Reši problem razvoza na grafu s simpleksno metodo za omrežje. Pazi na skupno povpraševanje in ponudbo!

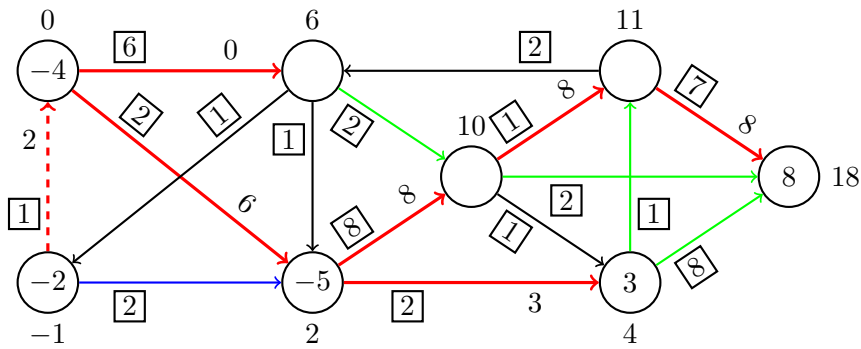


3. Reši problem razvoza na grafu z dvofazno simpleksno metodo za omrežje.

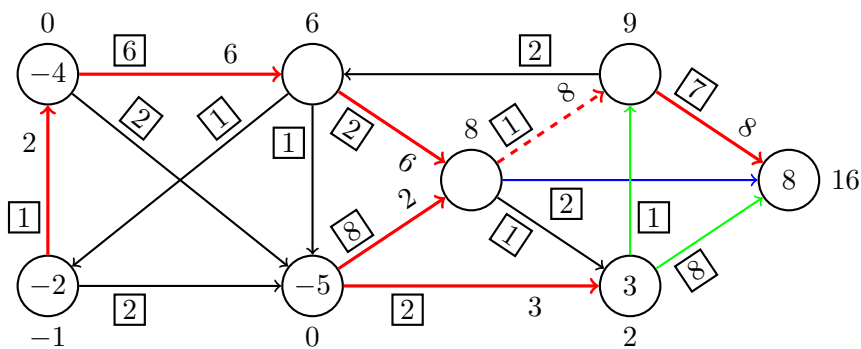
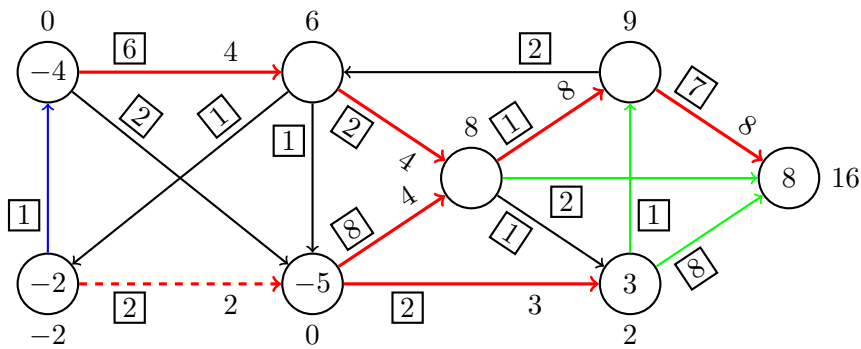
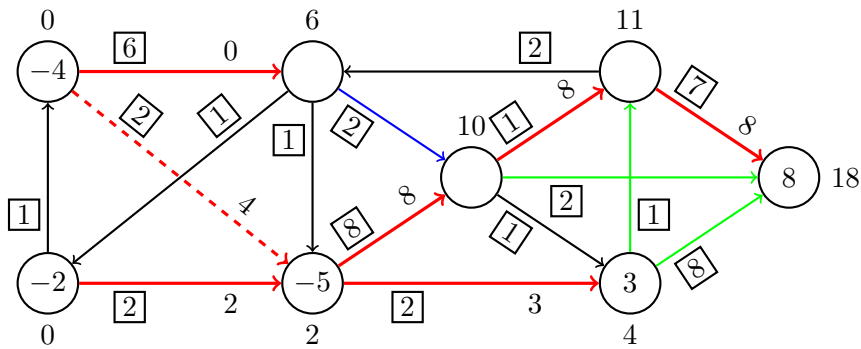


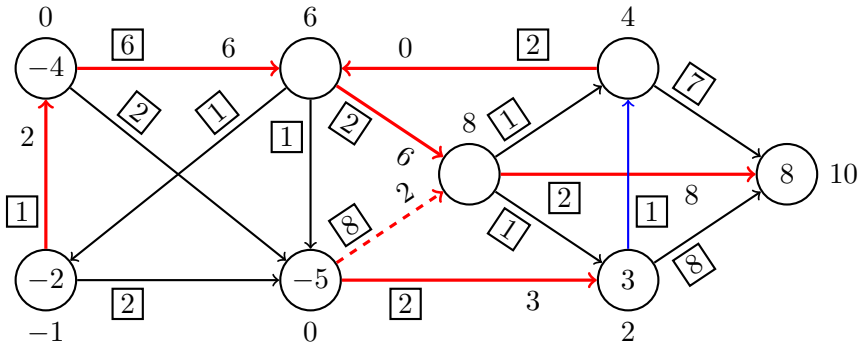
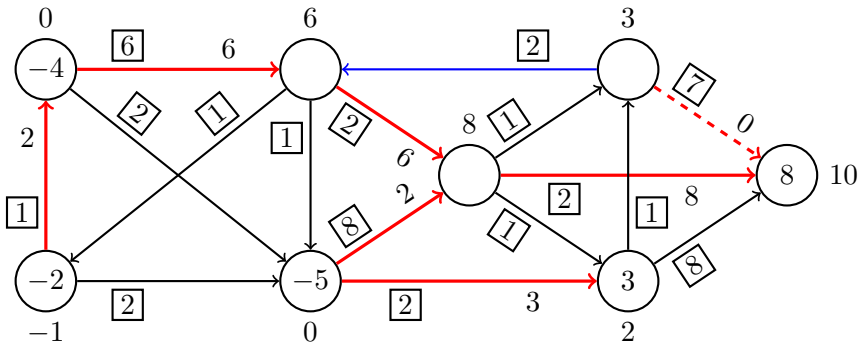
Rešitve

1. Primer drevesne dopustne rešitve:

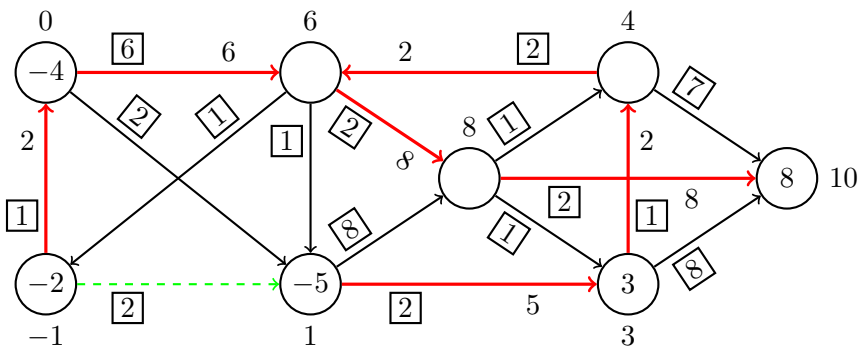


Reševanje:

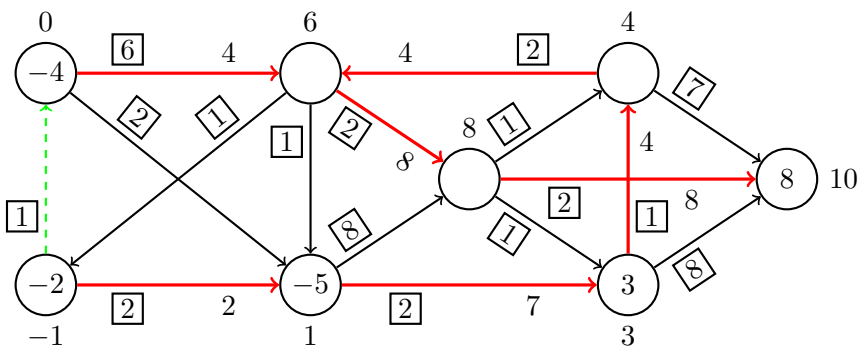




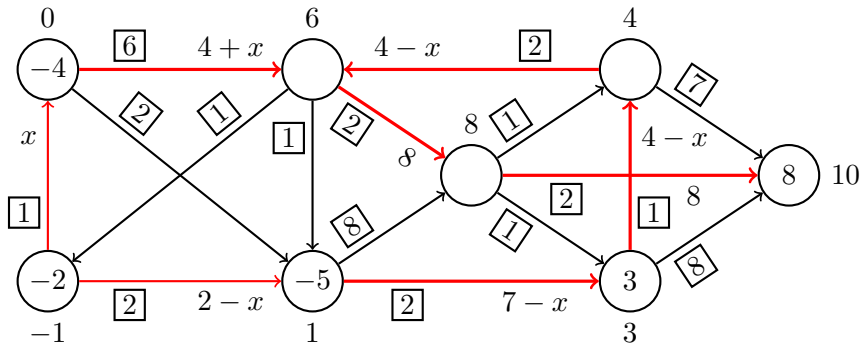
Rešitev:



Druga rešitev:

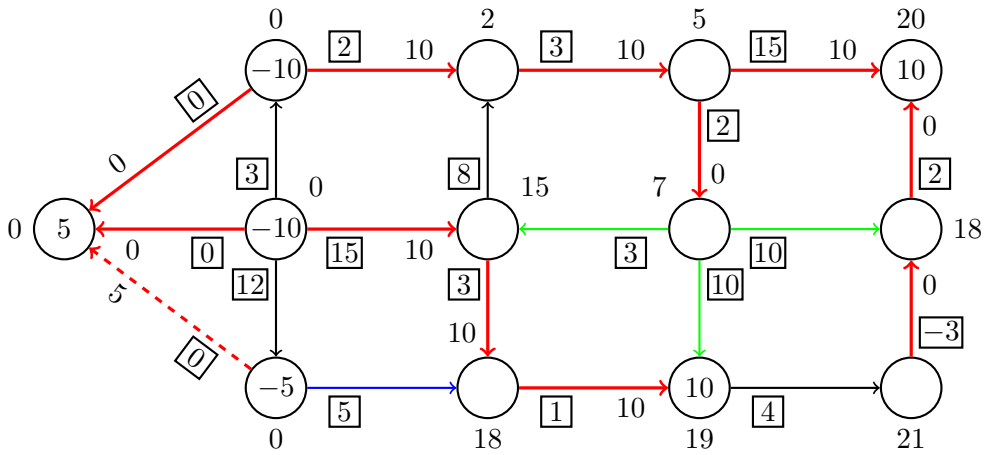


Splošna rešitev ($0 \leq x \leq 2$):

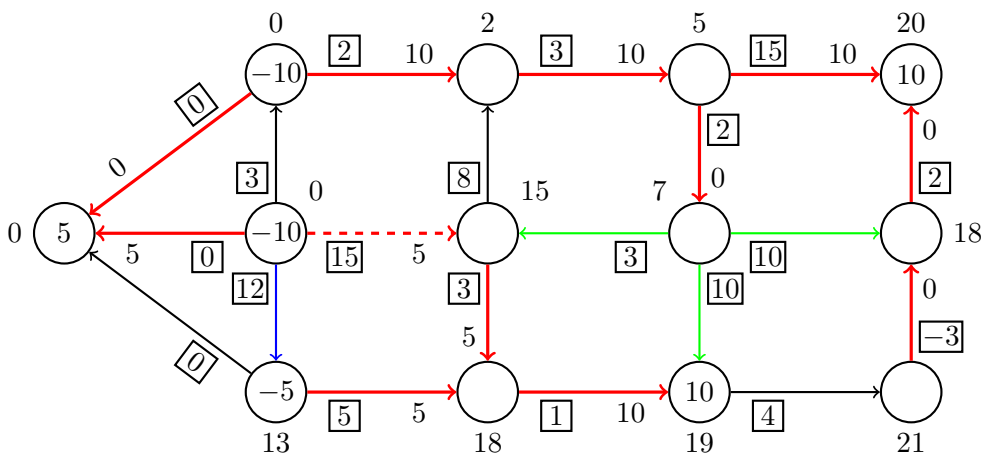


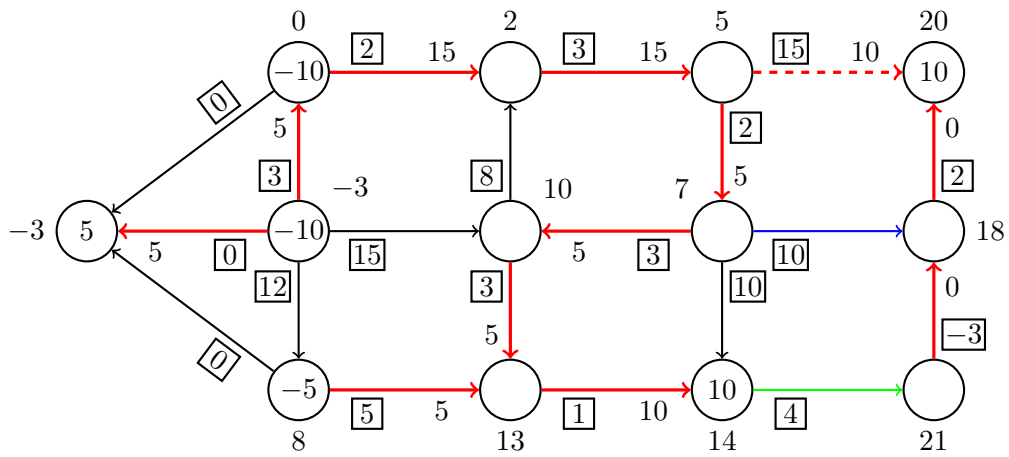
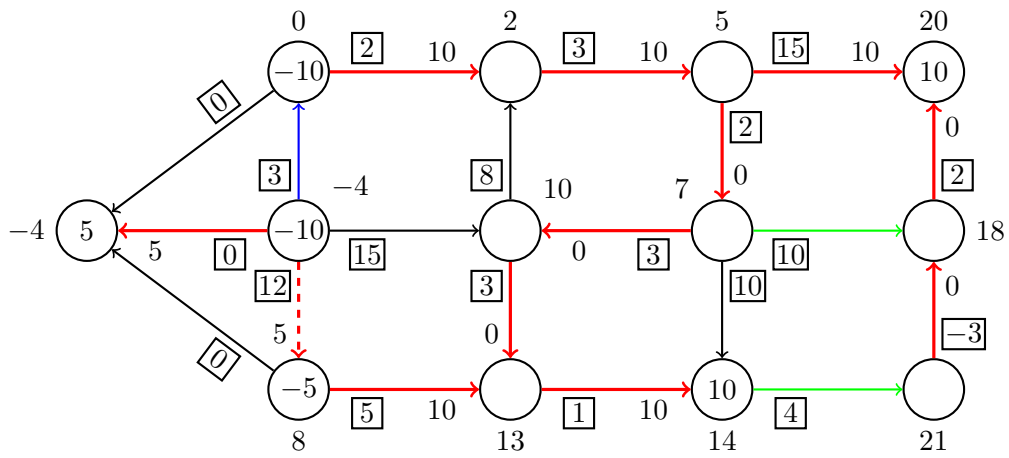
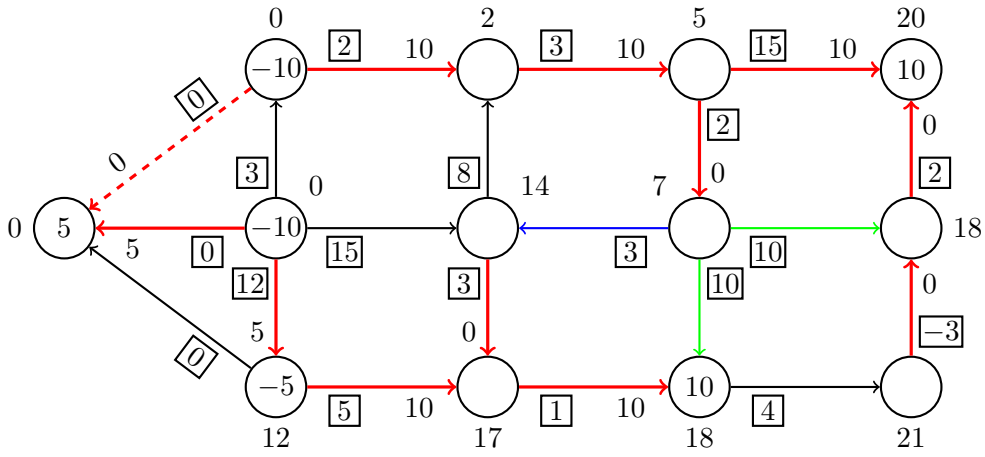
Cena razvoza: $6 \cdot (4 + x) + 1 \cdot x + 2 \cdot (2 - x) + 2 \cdot 8 + 2 \cdot (7 - x) + 2 \cdot 8 + 2 \cdot (4 - x) + 1 \cdot (4 - x) = 86$

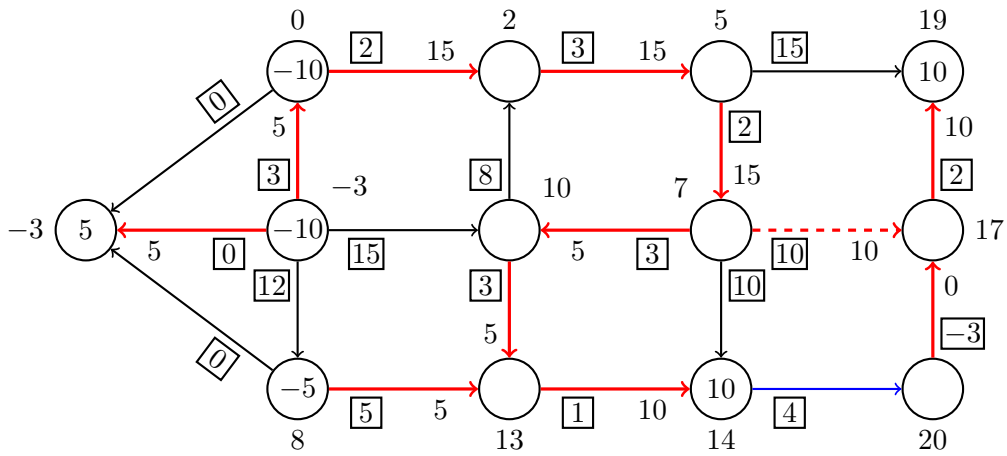
2. Dopolnitev grafa:



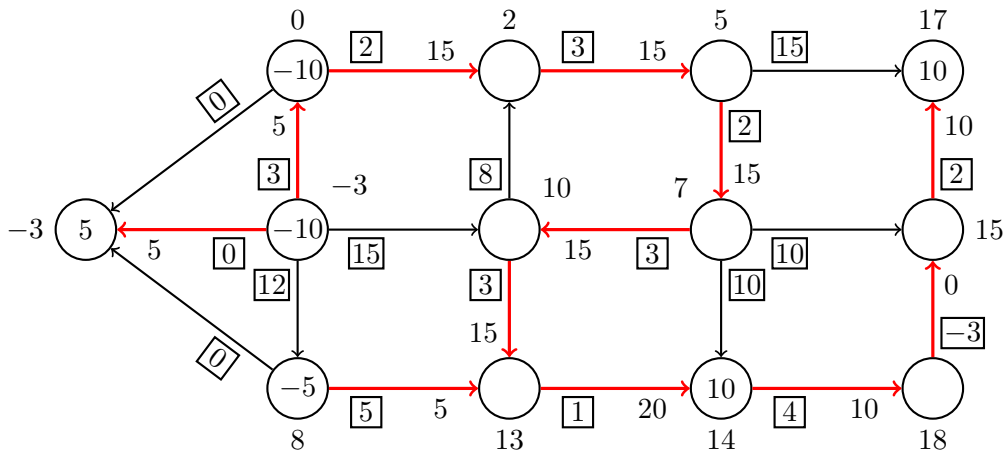
Reševanje:





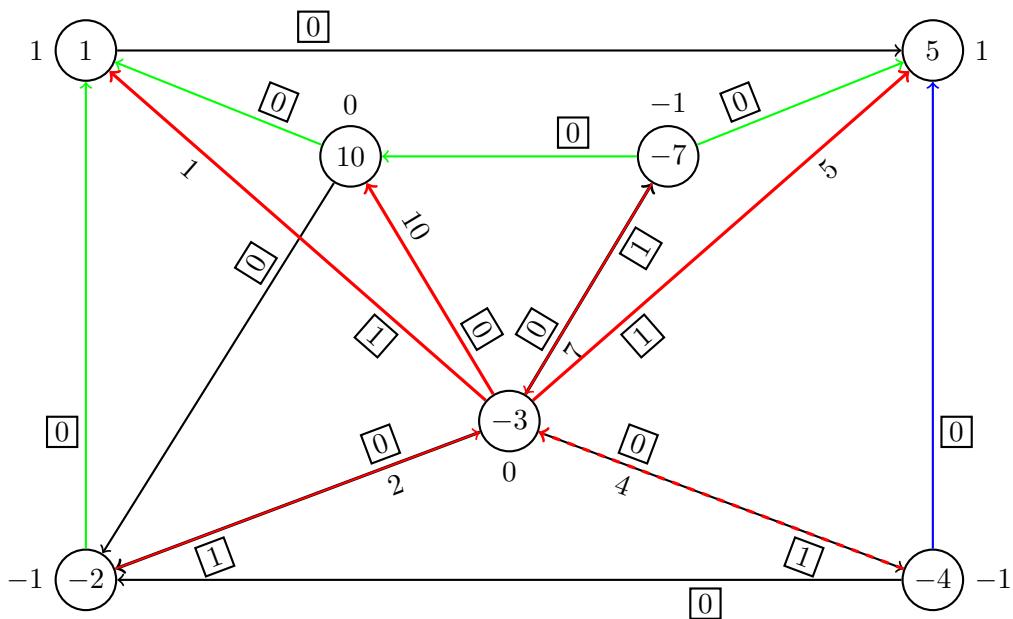


Rešitev:

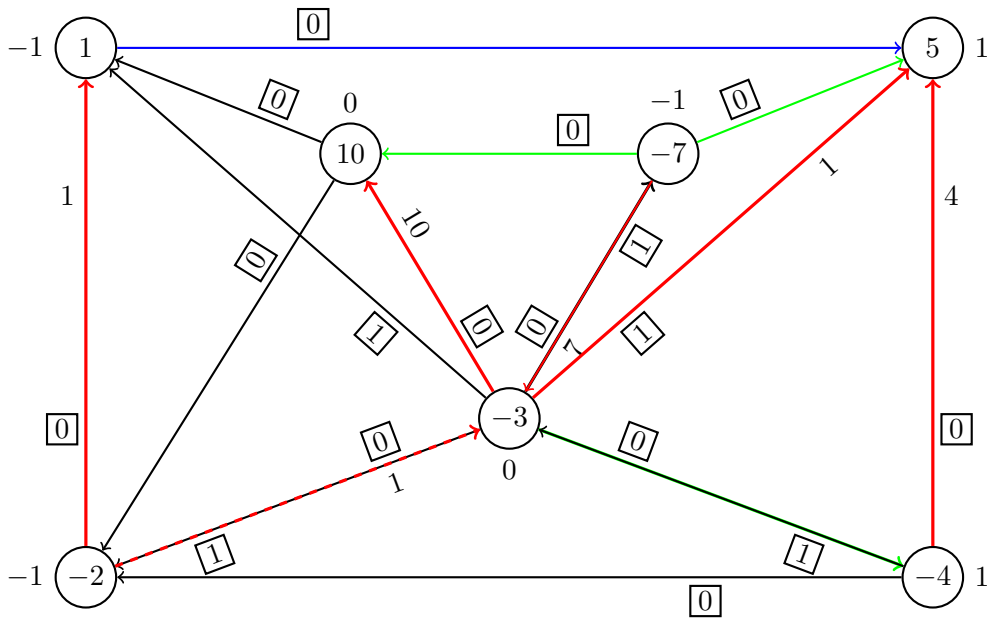
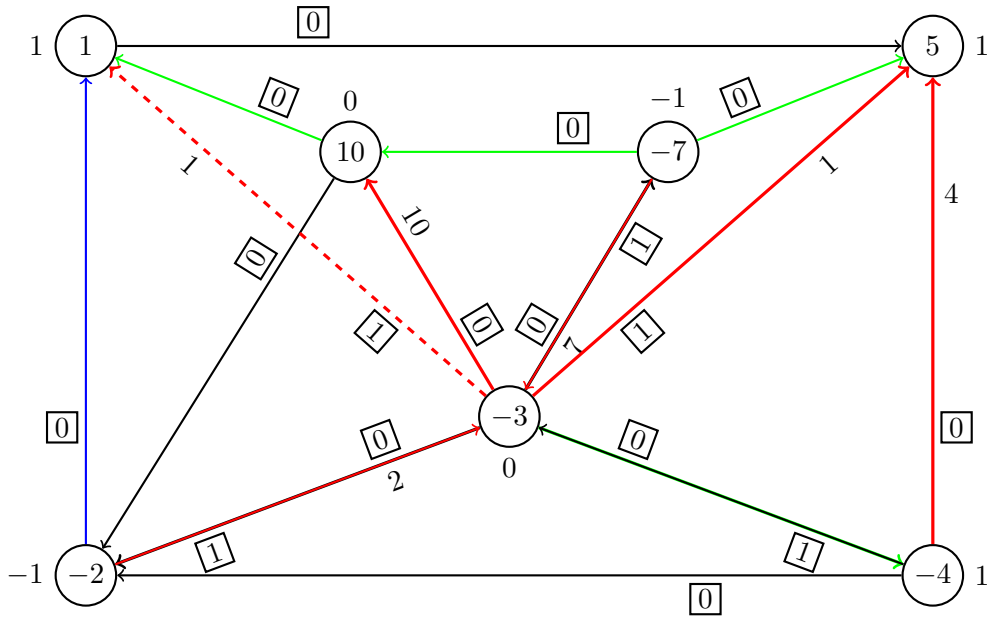


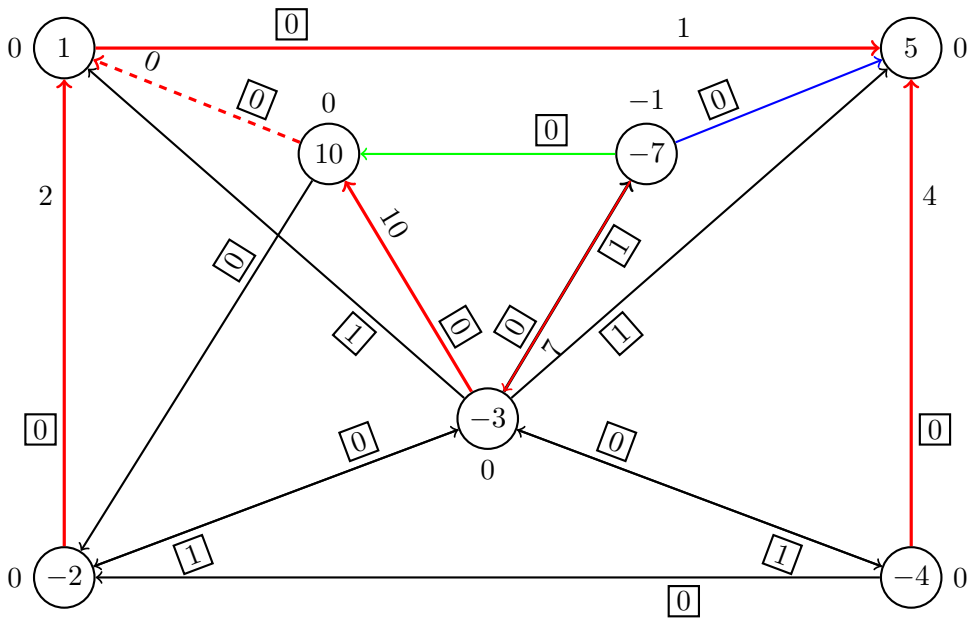
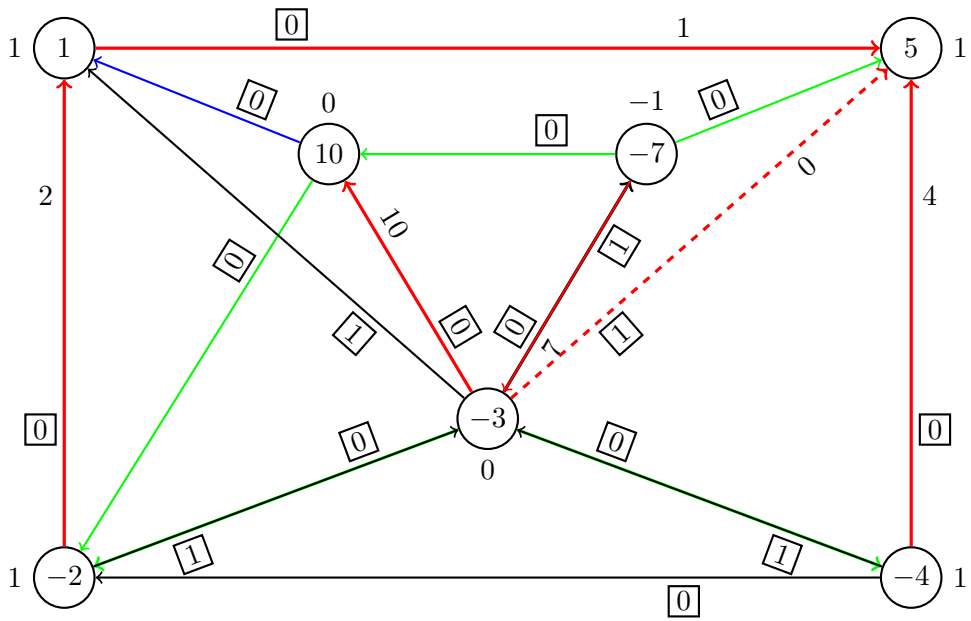
Cena razvoza: $2 \cdot 15 + 3 \cdot 5 + 5 \cdot 5 + 3 \cdot 15 + 3 \cdot 15 + 1 \cdot 20 + 2 \cdot 15 + 3 \cdot 15 + 4 \cdot 10 + 2 \cdot 10 + (-3) \cdot 10 = 285$

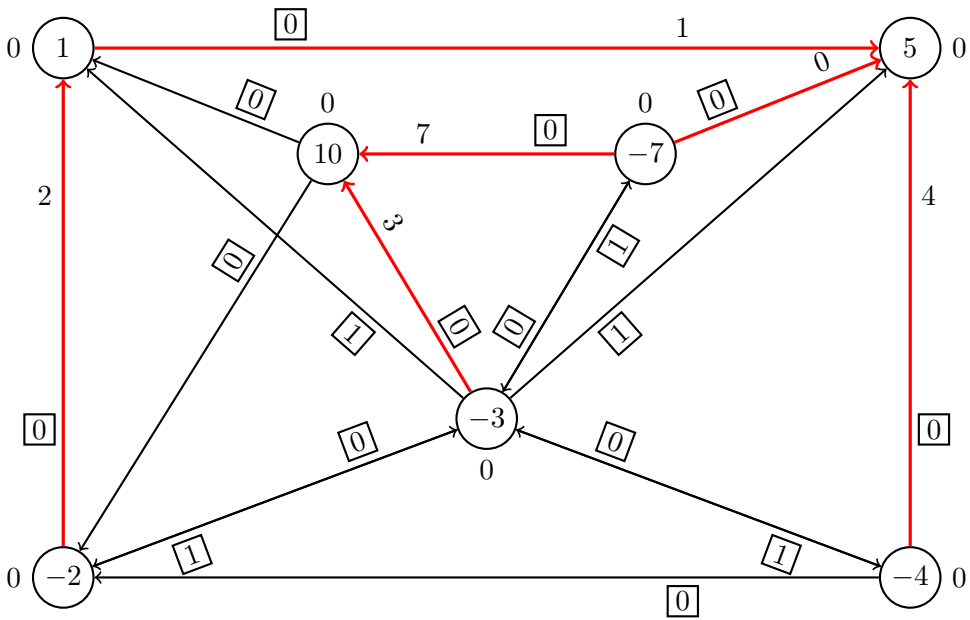
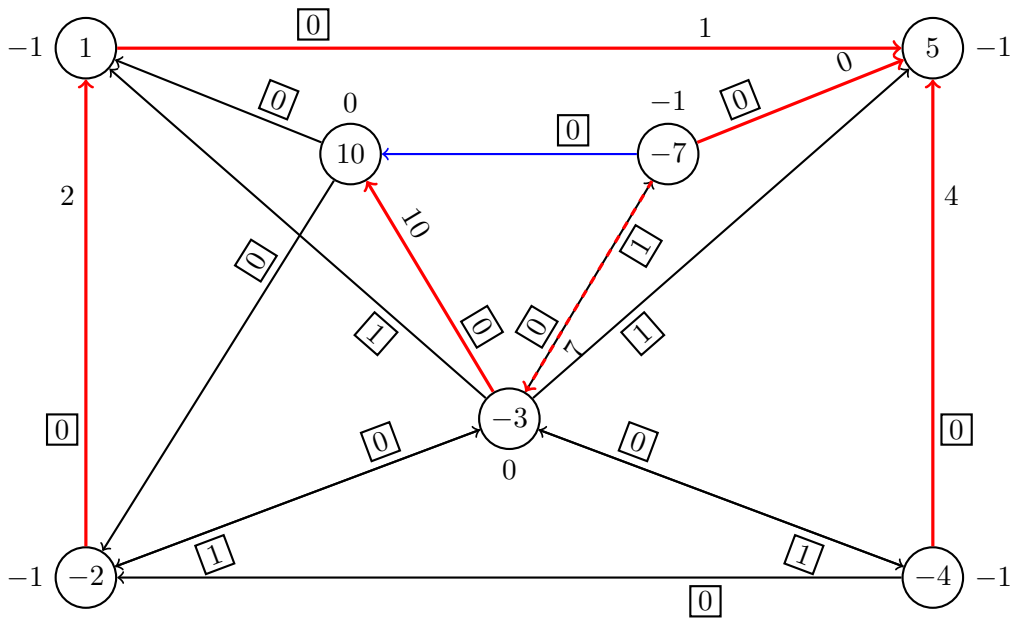
3. Najprej poiščemo začetno dopustno rešitev:



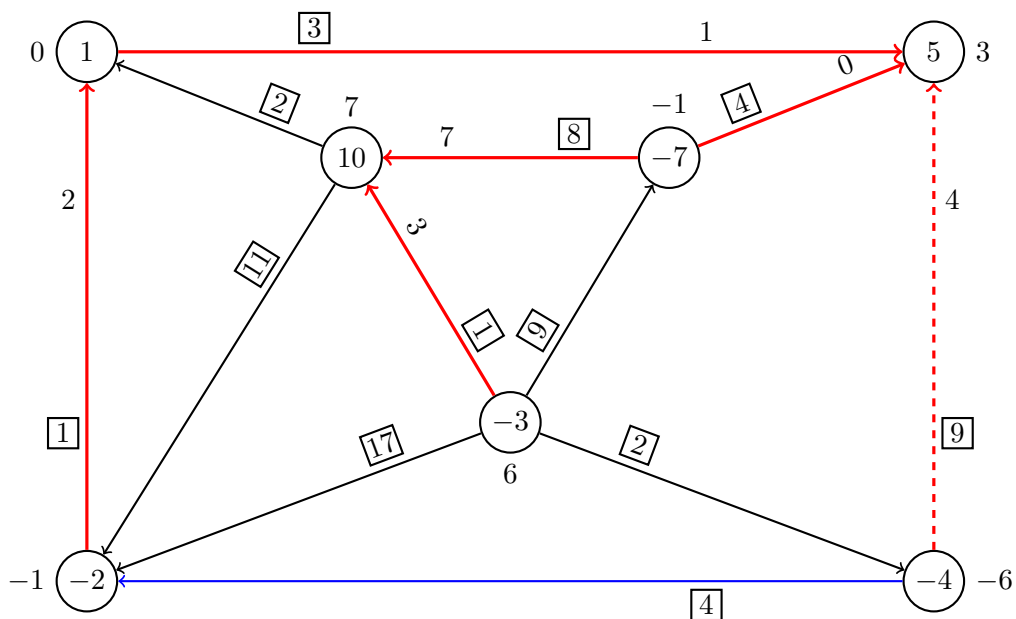
Prva faza:



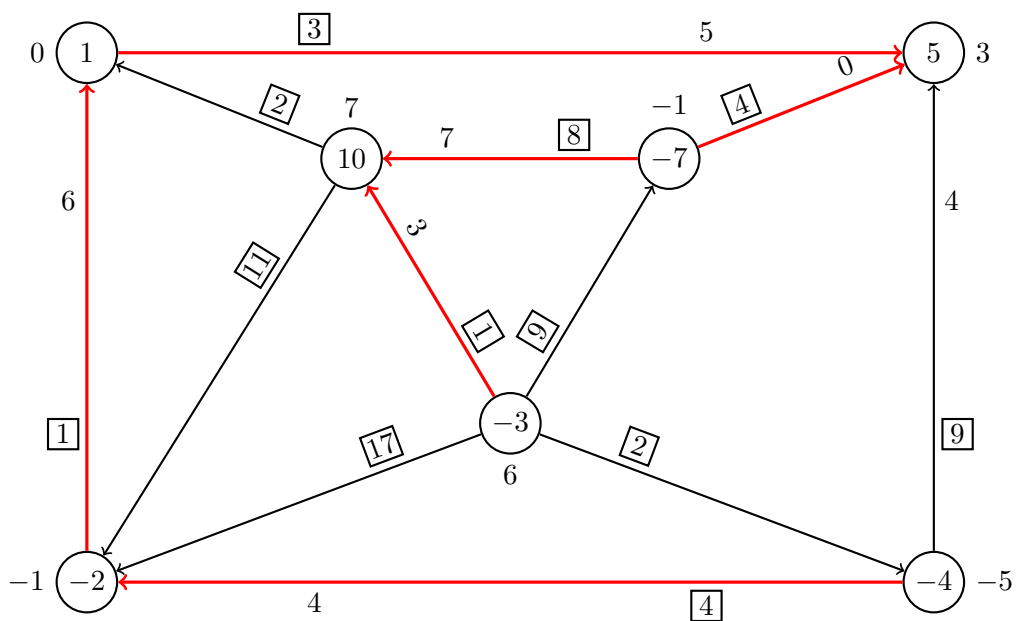




Našli smo optimalno rešitev, ki vsebuje samo povezave prvotnega grafa. Uporabimo jo za začetno rešitev druge faze.



Rešitev:



$$\text{Cena razvoza: } 3 \cdot 5 + 4 \cdot 4 + 1 \cdot 6 + 4 \cdot 0 + 8 \cdot 7 + 1 \cdot 3 = 96$$