```
! Keywords: Acadamia / Auctions / Demand Backlog / Dual Prices / Economic / Equilibrium /
Marketing;
MAX     9X1 + 4.5X2 + 3X3 + 2.25X4 + 15Y1 + 8Y2 + 5Y3 + 3Y4
      - 2BX - 1.5AY - A1 - 2A2 - 3A3 - 4A4 - 2B1 - 4B2 - 6B3
      - 8B4    ! Maximize revenue - cost for broker;
SUBJECT TO
 2)   - AY + A1 + A2 + A3 + A4 - AX = 0    ! amount shipped from A
 3)   - BX + B1 + B2 + B3 + B4 - BY = 0    ! amount shipped from B
 4)   - X1 - X2 - X3 - X4 + BX + AX = 0    ! amount shipped to X
 5)   - Y1 - Y2 - Y3 - Y4 + AY + BY = 0    ! amount shipped to Y
 6)     A1 <= 2
 7)     A2 <= 2
 8)     A3 <= 2
 9)     A4 <= 2
10)     B1 <= 2
11)     B2 <= 2
12)     B3 <= 2
13)     B4 <= 2
14)     X1 <= 2
15)     X2 <= 2
16)     X3 <= 2
17)     X4 <= 2
18)     Y1 <= 2
19)     Y2 <= 2
20)     Y3 <= 2
21)     Y4 <= 2
END
```