In[74]:= `program = {50 (20 x1 + 18 x2 + 16 x3 + 14 x4) - 132 000 - 200 (n2 + n3 + n4) - 100 (s1 + s2 + s3),`
`    x1 ≥ 0, x2 ≥ 0, x3 ≥ 0, x4 ≥ 0,`
`    50 (x1 + x2 + x3 + x4) ≤ 20 000, 50 (x1 + x2 + x3 + x4) ≥ 20 000,`
`    m1 ≥ 0, m1 ≤ 40, s1 ≥ 0, s1 ≤ 3 * m1, x1 ≤ 40 - m1,`
`    m2 ≥ 0, m2 ≤ 40 + n2, s2 ≥ 0, s2 ≤ 3 * m2, x2 ≤ 40 + n2 - m2,`
`    m3 ≥ 0, m3 ≤ 40 + n3, s3 ≥ 0, s3 ≤ 3 * m3, x3 ≤ 40 + n3 - m3,`
`    x4 ≤ 40 + n4,`
`    n2 ≥ 0, n2 ≤ s1, n3 ≥ 0, n3 ≤ n2 + s2, n4 ≥ 0, n4 ≤ n3 + s3`
`    }`

Out[74]= {-132 000 - 200 (n2 + n3 + n4) - 100 (s1 + s2 + s3) + 50 (20 x1 + 18 x2 + 16 x3 + 14 x4), x1 ≥ 0,
    x2 ≥ 0, x3 ≥ 0, x4 ≥ 0, 50 (x1 + x2 + x3 + x4) ≤ 20 000, 50 (x1 + x2 + x3 + x4) ≥ 20 000,
    m1 ≥ 0, m1 ≤ 40, s1 ≥ 0, s1 ≤ 3 m1, x1 ≤ 40 - m1, m2 ≥ 0, m2 ≤ 40 + n2, s2 ≥ 0,
    s2 ≤ 3 m2, x2 ≤ 40 - m2 + n2, m3 ≥ 0, m3 ≤ 40 + n3, s3 ≥ 0, s3 ≤ 3 m3, x3 ≤ 40 - m3 + n3,
    x4 ≤ 40 + n4, n2 ≥ 0, n2 ≤ s1, n3 ≥ 0, n3 ≤ n2 + s2, n4 ≥ 0, n4 ≤ n3 + s3}

In[75]:= `Maximize[program, {x1, x2, x3, x4, m1, m2, m3, s1, s2, s3, n2, n3, n4}]`

Out[75]= {128 000, {x1 → 0, x2 → 160, x3 → 160, x4 → 80, m1 → 40,
    m2 → 0, m3 → 0, s1 → 120, s2 → 0, s3 → 0, n2 → 120, n3 → 120, n4 → 40}}