**Problem L**

You work for a landscaping company.

You need four poles and 2 cubic yards of mulch for every tree that is planted.

Calculate the Material Requirements Plan below.

The beginning inventory for each item has been given.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Week | Beg. Inv. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|  | Quantity |  |  | 72 | 65 |  | 30 |  | 64 |
|  |  |  |  |  |  |  |  |  |  |  |
| Tree  Lead Time = 1 wk  Lot for Lot | Gross Requirements |  |  |  |  |  |  |  |  |  |
| Scheduled Receipts |  |  |  |  |  |  |  |  |  |
| Projected On-Hand | 2 |  |  |  |  |  |  |  |  |
| Net Requirements |  |  |  |  |  |  |  |  |  |
| Planned Order Receipts |  |  |  |  |  |  |  |  |  |
| Planned Order Releases |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Poles  Lead Time = 1 wk  Lot Size of 12 | Gross Requirements |  | 48 | 48 | 288 | 260 | 48 | 120 | 48 | 256 |
| Scheduled Receipts |  |  |  |  |  |  |  |  |  |
| Projected On-Hand | 14 |  |  |  |  |  |  |  |  |
| Net Requirements |  |  |  |  |  |  |  |  |  |
| Planned Order Receipts |  |  |  |  |  |  |  |  |  |
| Planned Order Releases |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Mulch  (in cubic yards)  Lead Time = 1 wk  Lot-Size of 9 | Gross Requirements |  | 18 | 18 | 144 | 130 | 18 | 60 | 18 | 128 |
| Scheduled Receipts |  |  |  |  |  |  |  |  |  |
| Projected On-Hand | 9 |  |  |  |  |  |  |  |  |
| Net Requirements |  |  |  |  |  |  |  |  |  |
| Planned Order Receipts |  |  |  |  |  |  |  |  |  |
| Planned Order Releases |  |  |  |  |  |  |  |  |  |