Question 1

The time-phased net requirements for the body assembly in a bicycle over the next 10 weeks are given below. Order setup cost $40 and the holding cost can be assumed as $1 per unit per week. The manager plans to have an ending inventory of 8 units and the initial inventory level is 4.

<table>
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<tr>
<th>Weeks</th>
<th>1</th>
<th>2</th>
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<th>5</th>
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<td>12</td>
<td>4</td>
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Find the lot sizes using the methods specified:

a) (8 points) EOQ Formula

b) (8 points) Silver-Meal heuristic

c) (8 points) Part period balancing

d) (8 points) Least unit cost heuristic

e) (8 points) Compare the holding and setup costs you found in parts (a) through (d) with the cost of a lot-for-lot policy.