```
 1 F:\Anaconda\python.exe C:\Users\123\OneDrive\□□\
   □□□□□□□□\code\task_2.py
 2 Epoch 10/1500, Loss: 1.5933868885040283
 3 Epoch 20/1500, Loss: 1.441338062286377
 4 Epoch 30/1500, Loss: 1.3627558946609497
 5 Epoch 40/1500, Loss: 1.28728187084198
 6 Epoch 50/1500, Loss: 1.1887800693511963
 7 Epoch 60/1500, Loss: 1.0937117338180542
 8 Epoch 70/1500, Loss: 1.0230146646499634
 9 Epoch 80/1500, Loss: 0.9679359197616577
10 Epoch 90/1500, Loss: 0.9220211505889893
11 Epoch 100/1500, Loss: 0.8795816898345947
12 Epoch 110/1500, Loss: 0.8383743166923523
13 Epoch 120/1500, Loss: 0.7973284721374512
14 Epoch 130/1500, Loss: 0.7550338506698608
15 Epoch 140/1500, Loss: 0.7043576836585999
16 Epoch 150/1500, Loss: 0.6394237279891968
17 Epoch 160/1500, Loss: 0.5690715909004211
18 Epoch 170/1500, Loss: 0.5168842673301697
19 Epoch 180/1500, Loss: 0.45102155208587646
20 Epoch 190/1500, Loss: 0.41084668040275574
21 Epoch 200/1500, Loss: 0.3630976378917694
22 Epoch 210/1500, Loss: 0.3424603343009949
23 Epoch 220/1500, Loss: 0.2934650778770447
24 Epoch 230/1500, Loss: 0.274463951587677
25 Epoch 240/1500, Loss: 0.24144116044044495
26 Epoch 250/1500, Loss: 0.23809808492660522
27 Epoch 260/1500, Loss: 0.2242591828107834
28 Epoch 270/1500, Loss: 0.19280515611171722
29 Epoch 280/1500, Loss: 0.19157038629055023
30 Epoch 290/1500, Loss: 0.18643440306186676
31 Epoch 300/1500, Loss: 0.16799689829349518
32 Epoch 310/1500, Loss: 0.159821555018425
33 Epoch 320/1500, Loss: 0.15496286749839783
34 Epoch 330/1500, Loss: 0.16873224079608917
35 Epoch 340/1500, Loss: 0.13923356069087982
36 Epoch 350/1500, Loss: 0.13633081316947937
37 Epoch 360/1500, Loss: 0.13658525049686432
38 Epoch 370/1500, Loss: 0.14046625792980194
39 Epoch 380/1500, Loss: 0.13189826905727386
40 Epoch 390/1500, Loss: 0.12052781134843826
```

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41 Epoch 400/1500, Loss: 0.12325349450111389
42 Epoch 410/1500, Loss: 0.13051427900791168
43 Epoch 420/1500, Loss: 0.12537655234336853
44 Epoch 430/1500, Loss: 0.11757221817970276
45 Epoch 440/1500, Loss: 0.10968074947595596
46 Epoch 450/1500, Loss: 0.1072428822517395
47 Epoch 460/1500, Loss: 0.10711578279733658
48 Epoch 470/1500, Loss: 0.11706759035587311
49 Epoch 480/1500, Loss: 0.1105937734246254
50 Epoch 490/1500, Loss: 0.1160334125161171
51 Epoch 500/1500, Loss: 0.11140396445989609
52 Epoch 510/1500, Loss: 0.1116156205534935
53 Epoch 520/1500, Loss: 0.10410087555646896
54 Epoch 530/1500, Loss: 0.10026415437459946
55 Epoch 540/1500, Loss: 0.09642055630683899
56 Epoch 550/1500, Loss: 0.09664860367774963
57 Epoch 560/1500, Loss: 0.10765355825424194
58 Epoch 570/1500, Loss: 0.10236047208309174
59 Epoch 580/1500, Loss: 0.10748258233070374
60 Epoch 590/1500, Loss: 0.09937603771686554
61 Epoch 600/1500, Loss: 0.09442183375358582
62 Epoch 610/1500, Loss: 0.09102026373147964
63 Epoch 620/1500, Loss: 0.09027233719825745
64 Epoch 630/1500, Loss: 0.09500611573457718
65 Epoch 640/1500, Loss: 0.09798139333724976
66 Epoch 650/1500, Loss: 0.09706585854291916
67 Epoch 660/1500, Loss: 0.09141402691602707
68 Epoch 670/1500, Loss: 0.08964336663484573
69 Epoch 680/1500, Loss: 0.08726036548614502
70 Epoch 690/1500, Loss: 0.09036720544099808
71 Epoch 700/1500, Loss: 0.10230042785406113
72 Epoch 710/1500, Loss: 0.0937279760837555
73 Epoch 720/1500, Loss: 0.0935167670249939
74 Epoch 730/1500, Loss: 0.08665982633829117
75 Epoch 740/1500, Loss: 0.085922971367836
76 Epoch 750/1500, Loss: 0.09782256931066513
77 Epoch 760/1500, Loss: 0.0901562720537185
78 Epoch 770/1500, Loss: 0.08475568145513535
79 Epoch 780/1500, Loss: 0.08780721575021744
80 Epoch 790/1500, Loss: 0.08325846493244171
81 Epoch 800/1500, Loss: 0.08707177639007568
```

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 82 Epoch 810/1500, Loss: 0.090413719415666467
 83 Epoch 820/1500, Loss: 0.08520978689193726
 84 Epoch 830/1500, Loss: 0.08180774748325348
 85 Epoch 840/1500, Loss: 0.0926678478717804
 86 Epoch 850/1500, Loss: 0.08494412899017334
 87 Epoch 860/1500, Loss: 0.085756316781044
 88 Epoch 870/1500, Loss: 0.08778002858161926
 89 Epoch 880/1500, Loss: 0.08123094588518143
 90 Epoch 890/1500, Loss: 0.08029936999082565
 91 Epoch 900/1500, Loss: 0.08846063911914825
 92 Epoch 910/1500, Loss: 0.08598148822784424
 93 Epoch 920/1500, Loss: 0.08064431697130203
 94 Epoch 930/1500, Loss: 0.0872335210442543
 95 Epoch 940/1500, Loss: 0.08156026154756546
 96 Epoch 950/1500, Loss: 0.08215007930994034
 97 Epoch 960/1500, Loss: 0.07909394800662994
 98 Epoch 970/1500, Loss: 0.09687823057174683
 99 Epoch 980/1500, Loss: 0.07994091510772705
100 Epoch 990/1500, Loss: 0.0783921331167221
101 Epoch 1000/1500, Loss: 0.08387702703475952
102 Epoch 1010/1500, Loss: 0.0789334774017334
103 Epoch 1020/1500, Loss: 0.08916733413934708
104 Epoch 1030/1500, Loss: 0.07770832628011703
105 Epoch 1040/1500, Loss: 0.07713174819946289
106 Epoch 1050/1500, Loss: 0.08207818120718002
107 Epoch 1060/1500, Loss: 0.07803846895694733
108 Epoch 1070/1500, Loss: 0.08625983446836472
109 Epoch 1080/1500, Loss: 0.07873603701591492
110 Epoch 1090/1500, Loss: 0.07973767071962357
111 Epoch 1100/1500, Loss: 0.07750500738620758
112 Epoch 1110/1500, Loss: 0.08516930043697357
113 Epoch 1120/1500, Loss: 0.08037354052066803
114 Epoch 1130/1500, Loss: 0.08191472291946411
115 Epoch 1140/1500, Loss: 0.07588879019021988
116 Epoch 1150/1500, Loss: 0.0753711387515068
117 Epoch 1160/1500, Loss: 0.08693604916334152
118 Epoch 1170/1500, Loss: 0.0805216133594513
119 Epoch 1180/1500, Loss: 0.07637567073106766
120 Epoch 1190/1500, Loss: 0.08309558033943176
121 Epoch 1200/1500, Loss: 0.0748892799198135
122 Epoch 1210/1500, Loss: 0.07490961998701096
```

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123 Epoch 1220/1500, Loss: 0.07695974409580231
124 Epoch 1230/1500, Loss: 0.07688229531049728
125 Epoch 1240/1500, Loss: 0.07636814564466476
126 Epoch 1250/1500, Loss: 0.08217822760343552
127 Epoch 1260/1500, Loss: 0.07404188811779022
128 Epoch 1270/1500, Loss: 0.07398679852485657
129 Epoch 1280/1500, Loss: 0.08229859918355942
130 Epoch 1290/1500, Loss: 0.08048062771558762
131 Epoch 1300/1500, Loss: 0.07760190218687057
132 Epoch 1310/1500, Loss: 0.07383804768323898
133 Epoch 1320/1500, Loss: 0.08814412355422974
134 Epoch 1330/1500, Loss: 0.07701501250267029
135 Epoch 1340/1500, Loss: 0.07806780189275742
136 Epoch 1350/1500, Loss: 0.07485702633857727
137 Epoch 1360/1500, Loss: 0.07424432784318924
138 Epoch 1370/1500, Loss: 0.07299734652042389
139 Epoch 1380/1500, Loss: 0.07231922447681427
140 Epoch 1390/1500, Loss: 0.08132701367139816
141 Epoch 1400/1500, Loss: 0.07546380162239075
142 Epoch 1410/1500, Loss: 0.07216335833072662
143 Epoch 1420/1500, Loss: 0.08804082125425339
144 Epoch 1430/1500, Loss: 0.07871301472187042
145 Epoch 1440/1500, Loss: 0.07782459259033203
146 Epoch 1450/1500, Loss: 0.07244620472192764
147 Epoch 1460/1500, Loss: 0.07895641773939133
148 Epoch 1470/1500, Loss: 0.07435401529073715
149 Epoch 1480/1500, Loss: 0.07673990726470947
150 Epoch 1490/1500, Loss: 0.07410500943660736
151 Epoch 1500/1500, Loss: 0.07219075411558151
152 Total predicted cost using Equation 3.1: 63185.
    55859375
153 Mean predicted cost using Equation 3.1: 0.
    5045157984170393
154 Test Loss: 10.76260757446289
155 Epoch 10/1000, Loss: 1.8728617429733276
156 Epoch 20/1000, Loss: 1.8244439363479614
157 Epoch 30/1000, Loss: 1.7821428775787354
158 Epoch 40/1000, Loss: 1.745966911315918
159 Epoch 50/1000, Loss: 1.7156068086624146
160 Epoch 60/1000, Loss: 1.6905590295791626
161 Epoch 70/1000, Loss: 1.670225977897644
```

```
162 Epoch 80/1000, Loss: 1.6539828777313232
163 Epoch 90/1000, Loss: 1.6412171125411987
164 Epoch 100/1000, Loss: 1.6313515901565552
165 Epoch 110/1000, Loss: 1.6238586902618408
166 Epoch 120/1000, Loss: 1.6182688474655151
167 Epoch 130/1000, Loss: 1.6141753196716309
168 Epoch 140/1000, Loss: 1.6112335920333862
169 Epoch 150/1000, Loss: 1.6091598272323608
170 Epoch 160/1000, Loss: 1.6077264547348022
171 Epoch 170/1000, Loss: 1.6067554950714111
172 Epoch 180/1000, Loss: 1.6061104536056519
173 Epoch 190/1000, Loss: 1.6056909561157227
174 Epoch 200/1000, Loss: 1.6054236888885498
175 Epoch 210/1000, Loss: 1.60525643825531
176 Epoch 220/1000, Loss: 1.6051545143127441
177 Epoch 230/1000, Loss: 1.6050935983657837
178 Epoch 240/1000, Loss: 1.605057954788208
179 Epoch 250/1000, Loss: 1.6050374507904053
180 Epoch 260/1000, Loss: 1.6050260066986084
181 Epoch 270/1000, Loss: 1.6050196886062622
182 Epoch 280/1000, Loss: 1.6050162315368652
183 Epoch 290/1000, Loss: 1.6050145626068115
184 Epoch 300/1000, Loss: 1.6050137281417847
185 Epoch 310/1000, Loss: 1.6050132513046265
186 Epoch 320/1000, Loss: 1.605013132095337
187 Epoch 330/1000, Loss: 1.6050130128860474
188 Epoch 340/1000, Loss: 1.6050127744674683
189 Epoch 350/1000, Loss: 1.6050130128860474
190 Epoch 360/1000, Loss: 1.6050130128860474
191 Epoch 370/1000, Loss: 1.6050127744674683
192 Epoch 380/1000, Loss: 1.6050130128860474
193 Epoch 390/1000, Loss: 1.6050127744674683
194 Epoch 400/1000, Loss: 1.6050127744674683
195 Epoch 410/1000, Loss: 1.6050127744674683
196 Epoch 420/1000, Loss: 1.6050127744674683
197 Epoch 430/1000, Loss: 1.6050130128860474
198 Epoch 440/1000, Loss: 1.6050130128860474
199 Epoch 450/1000, Loss: 1.6050127744674683
200 Epoch 460/1000, Loss: 1.6050130128860474
201 Epoch 470/1000, Loss: 1.6050130128860474
202 Epoch 480/1000, Loss: 1.6050130128860474
```

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203 Epoch 490/1000, Loss: 1.6050130128860474
204 Epoch 500/1000, Loss: 1.6050130128860474
205 Epoch 510/1000, Loss: 1.6050130128860474
206 Epoch 520/1000, Loss: 1.6050130128860474
207 Epoch 530/1000, Loss: 1.6050130128860474
208 Epoch 540/1000, Loss: 1.6050130128860474
209 Epoch 550/1000, Loss: 1.6050130128860474
210 Epoch 560/1000, Loss: 1.6050130128860474
211 Epoch 570/1000, Loss: 1.6050130128860474
212 Epoch 580/1000, Loss: 1.6050130128860474
213 Epoch 590/1000, Loss: 1.6050130128860474
214 Epoch 600/1000, Loss: 1.6050130128860474
215 Epoch 610/1000, Loss: 1.6050130128860474
216 Epoch 620/1000, Loss: 1.6050130128860474
217 Epoch 630/1000, Loss: 1.6050130128860474
218 Epoch 640/1000, Loss: 1.6050130128860474
219 Epoch 650/1000, Loss: 1.6050130128860474
220 Epoch 660/1000, Loss: 1.6050130128860474
221 Epoch 670/1000, Loss: 1.6050130128860474
222 Epoch 680/1000, Loss: 1.6050130128860474
223 Epoch 690/1000, Loss: 1.6050130128860474
224 Epoch 700/1000, Loss: 1.6050130128860474
225 Epoch 710/1000, Loss: 1.6050130128860474
226 Epoch 720/1000, Loss: 1.6050130128860474
227 Epoch 730/1000, Loss: 1.6050130128860474
228 Epoch 740/1000, Loss: 1.6050130128860474
229 Epoch 750/1000, Loss: 1.6050130128860474
230 Epoch 760/1000, Loss: 1.6050130128860474
231 Epoch 770/1000, Loss: 1.6050130128860474
232 Epoch 780/1000, Loss: 1.6050130128860474
233 Epoch 790/1000, Loss: 1.6050130128860474
234 Epoch 800/1000, Loss: 1.6050130128860474
235 Epoch 810/1000, Loss: 1.6050130128860474
236 Epoch 820/1000, Loss: 1.6050130128860474
237 Epoch 830/1000, Loss: 1.6050130128860474
238 Epoch 840/1000, Loss: 1.6050130128860474
239 Epoch 850/1000, Loss: 1.6050130128860474
240 Epoch 860/1000, Loss: 1.6050130128860474
241 Epoch 870/1000, Loss: 1.6050130128860474
242 Epoch 880/1000, Loss: 1.6050130128860474
243 Epoch 890/1000, Loss: 1.6050130128860474
```

```
244 Epoch 900/1000, Loss: 1.6050130128860474
245 Epoch 910/1000, Loss: 1.6050130128860474
246 Epoch 920/1000, Loss: 1.6050130128860474
247 Epoch 930/1000, Loss: 1.6050130128860474
248 Epoch 940/1000, Loss: 1.6050130128860474
249 Epoch 950/1000, Loss: 1.6050130128860474
250 Epoch 960/1000, Loss: 1.6050130128860474
251 Epoch 970/1000, Loss: 1.6050130128860474
252 Epoch 980/1000, Loss: 1.6050130128860474
253 Epoch 990/1000, Loss: 1.6050130128860474
254 Epoch 1000/1000, Loss: 1.6050130128860474
255 Total predicted cost using Equation 3.2: 57572.
    3203125
256
257 Process finished with exit code 0
258
```