

### Question #75095, Economics / Other

Sunrise Juice Company sells its output in a perfectly competitive market. The firm's total cost function is given in the following schedule:

Output Total Cost

(Units) (\$)

0 50

10 120

20 170

30 210

40 260

50 330

60 430

Total costs include a "normal" return on the time (labor services) and capital that the owner has invested in the firm. The prevailing market price is \$7 per unit.

(a) Prepare (i) marginal cost and (ii) average total cost schedules for the firm.

(b) What is the firm's profit maximizing output level?

(c) Is the industry in long-run equilibrium? Justify your answer.

Answer:

a)

Q	TC	MC	ATC
0	50	-	-
10	120	7	12
20	170	5	8.5
30	210	4	7
40	260	5	6.5
50	330	6	6.6
60	430	10	7.17

b) the firm's profit maximizing output level is 30 units

c) No, industry not in long-run equilibrium, because firms have profit.

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