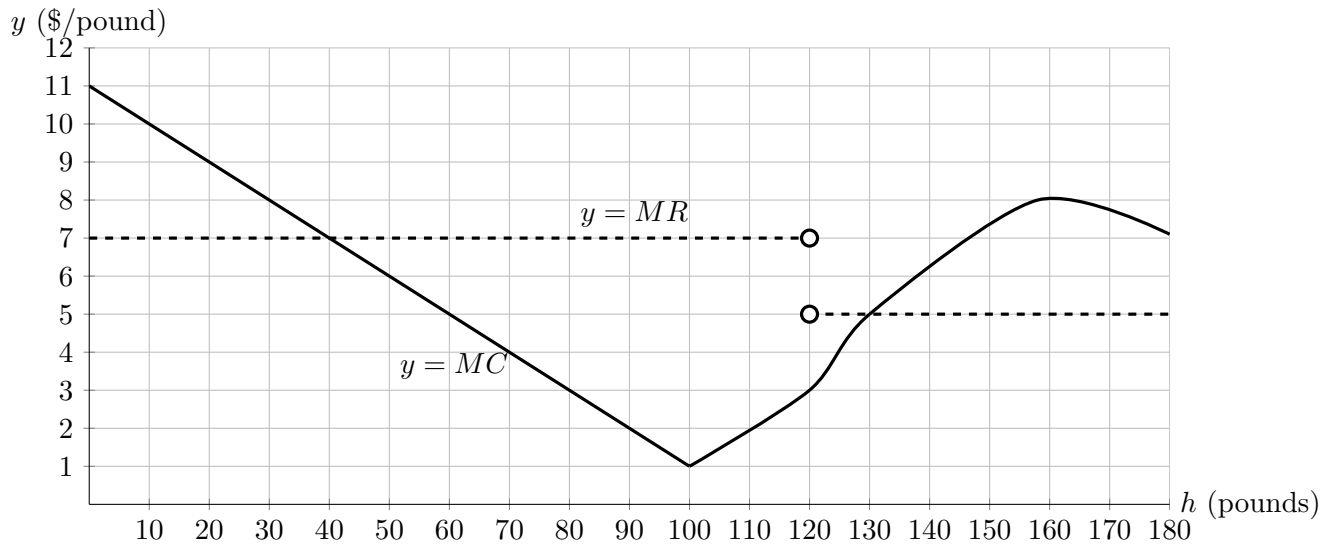


10. [10 points] The Happy Hives Bee Farm sells honey. The graph below shows marginal revenue MR (dashed) and marginal cost MC (solid), in dollars per pound, where h is the number of pounds of honey.



- a. [7 points] Use the graph to estimate the answers to the following questions. You do not need to show work. If an answer can't be found with the information given, write "NEI".
- For what value(s) of h in the interval $[0, 180]$ is the cost function C minimized?

Answer: $h =$ _____

- For what value(s) of h in the interval $[0, 180]$ is MC minimized?

Answer: $h =$ _____

- For what value(s) of h in the interval $[0, 180]$ is profit maximized?

Answer: h _____

- What are the fixed costs of the farm?

Answer: _____

- For what values of h in the interval $[0, 180]$ is the profit function concave up?

Answer: _____

- b. [3 points] The farm currently sells 20 pounds of honey but is thinking of increasing to 80 pounds of honey. Will this increase or decrease profit? (Circle one.)

INCREASE

DECREASE

By approximately how much will the profit change?

Answer: \$ _____