

Quiz 12 - SOLUTION

- Attila's other firm produces identical outputs at two different plants. If the marginal cost at the first plant exceeds the marginal cost at the second plant, how can the firm reduce costs and maintain the same level of output?

By simultaneously producing more output at the second plant and reducing production at the first plant, the firm can reduce costs.

- A firm has a cost function given by $c(y) = 50y^2 + 10000$.
 - Write its average cost function. $AC(y) = \frac{c(y)}{y} = 50y + \frac{10000}{y}$
 - Write its average variable cost function. $AVC(y) = \frac{c_v(y)}{y} = 50y$
 - Write its marginal cost function. $MC(y) = \frac{d}{dy}c(y) = 100y$
 - In the graph below, label the three cost curves and draw the firm's short-run supply curve.
 - Write the mathematical formula for the firm's short-run supply curve. $y(p) = \frac{p}{100}$
 - In the graph below, shade in the area representing the profit-maximizing firm's profits (!) when $p = 2000$.

