Profit *The profit for a product is given by the function* $P(x) = 939x - 12{,}207$*, where* x *is the number of units produced and sold. Find the marginal profit for the product.*[1]

The rate of change, or slope, of a profit function is called the marginal profit. This vocabulary is also true for total cost and total revenue functions. Take a look at page 53 of your textbook:

Marginal Cost, Revenue, and Profit

For total cost, total revenue, and profit functions* that are linear, the rates of change are called **marginal cost, marginal revenue**, and **marginal profit**, respectively.

When you see the word "marginal", you should think "slope" of the associated function.

In our case, the function $P(x)$ is already in the form $y = mx + b$ so it's easy to read the slope, m, directly from the equation.

$m = 939$

The marginal profit for the product is \$939 per unit.

* In this College Algebra text, "total cost" and "total revenue" are frequently used interchangeably with "cost" and "revenue" respectively.

[1] Harshbarger/Yocco, *College Algebra In Context, 5e*, p. 58, #62.