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Math 105 Exam I. 1.6in Name: \_\_\_\_\_

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questions

A company determines that when producing  $x$  units, its profit is given by this function:  $P(x) = -13x^2 + 200x - 1800$ .

parts

[4] What is the marginal profit function?

Marginal profit is the derivative (with respect to production level) of profit:

[2] What is the marginal profit when the production level  $x$  is 150?

Plug 150 in for  $x$ :  $MP(150) = 100$ .

[2] What does that tell you about the change in profit as the production level increases from 150 to 151?  
Profit increases by 100.