

YOUR NAME: _____

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Read each problem **very carefully** before starting to solve it and do only what is asked. Each problem is worth around 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. [6 points] Consider the functions $f(x) = -x^2 + 2x$ and $g(x) = x$.

(a) Sketch the region enclosed by the graphs of f and g .

(b) Compute the area of the region in Part (a).