Math 241 Fall 2018 Professor MG Quiz 8 Name: _____

Show all work and circle/box your final answer. All answers must be simplified unless stated otherwise.

1. (5 points) Set up (but do not evaluate) the calculation needed for using midpoints to approximate the area above the x-axis and below $y = x^3 + 4$ from x = 0 to x = 12 using 3 rectangles.

2. (5 points) Find two numbers whose sum is 32 and whose product is maximized.