

To receive credit you **MUST SHOW ALL YOUR WORK.**

1. (8 pts) Use any method to evaluate each integral:

(a)  $\int_1^4 \left(3\sqrt{x} - \frac{1}{x}\right) dx$

(b)  $\int_0^4 |x - 3| dx$

2. (4 pts) Find the area below the curve  $y = 4 - x^2$ , but above the  $x$ -axis.