

M104, Practice Quiz for Quiz 9, April 10, covering sections 7.1 and 7.2

This practice quiz does not count for points, but I will use some of these problems as models which I'll follow for the real Quiz 9 on Wednesday, April 10, 2013.

(1) Find the following indefinite integrals:

$$(a) \int \left( x^2 - \frac{1}{x^4} \right) dx \quad (b) \int e^x dx \quad (c) \int \frac{3x^5 + x^3}{x^4} dx$$

(2) Find  $C(5)$  if  $C'(x) = 3x^2 - 2x$  and  $C(2) = 6$ .

(3) Find the following indefinite integrals:

$$(a) \int x e^{x^2} dx \quad (b) \int (6x + 2)^{15} dx$$
$$(c) \int 6(x^3 + x)^5 (3x^2 + 1) dx \quad (d) \int f'(g(x))g'(x) dx$$