

MATH 104      Quiz 7a      PRINT NAME \_\_\_\_\_



March 10, 2006      SIGNATURE \_\_\_\_\_

1. Let  $f(x) = \frac{1}{3}x^3 + x^2 - 8x + \ln\left(\frac{\pi}{2}\right)$ .

(a) (5 pts) Find the critical point(s) and list the interval(s) over which  $f$  is increasing.

(b) (5 pts) Find the inflection point(s) and list the interval(s) over which  $f$  is concave down.

(c) (5 pts) List the relative **maxima** of  $f$ .