Friday, February 14 George Voutsadakis

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. [4 points] Solve the absolute value equation

-5|3x+7| + 3 = -72

by hand, showing all your steps.

3. [4 points] Find a formula for  $y = f^{-1}(x)$  if  $f(x) = \sqrt{3x - 2} + 7$ .

3. [4 points] Sketch the graph of  $f^{-1}$  on the same coordinate axes as the graph of y = f(x) shown below.

