

YOUR NAME: \_\_\_\_\_

George Voutsadakis

Read each problem **very carefully** before starting to solve it. Each problem is worth 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. Rationalize and simplify  $\frac{\sqrt{3}}{3\sqrt{2} - 2\sqrt{3}}$ .

2. Solve the radical equation

$$1 + \sqrt{x + 7} = \sqrt{2x + 7}.$$