

QUIZ 1 - MATH 112

Friday, January 17

YOUR NAME: _____

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] Find an equation for the line ℓ , passing through $(1, 10)$, and perpendicular to the line ℓ' passing through $(-7, 0)$ and $(3, 1)$.

2. [6 points] Simplify the following expressions and write your answers as roots.

(a) $(\sqrt[5]{x^3})(\sqrt{x^7})$.

(b) $\frac{\sqrt[3]{x^5}}{\sqrt{x^3}}$.