QUIZ 1 - MATH 112

YOUR NAME:_____

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. Consider the line ℓ' that has equation $x + 7y = 21$.

   (a) Find an euqation for the line ℓ that is perpendicular to ℓ' and passes through $(-7, 13)$.

   (b) Find the y-intercept of ℓ.

2. (a) Find the value of
   $$\left(-\frac{1}{32}\right)^{-4/5} =$$

   (b) Simplify the following expression showing **all** steps:
   $$\frac{a^5(a^{1/2})^3}{(a^7)^{1/2}} =$$