Physics 2205
Quiz 2

Instructions: Put your name and 6-digit ID number in the upper right-hand corner of the card you are given. Write your answers in large letters in one row across the card (e.g. a b c d).

1. \(ax^2 + b = 6\)
   a. \(x = (6-b)/a\)  
   b. \(x = 6/a - b\)  
   c. \(x = \left(\frac{6-b}{a}\right)^{1/2}\)  
   d. \(x = \frac{(6+b)^{1/2}}{a}\)

2. The surface area of a sphere of radius \(r\) is:
   a. \(A = \pi r^2\)  
   b. \(A = 4 \pi r^2\)  
   c. \(A = (4/3) \pi r^3\)  
   d. \(A = (4/3) \pi r^2\)

3. In the triangle below, which of the following is true?
   a. \(\cos \alpha = y/r\)  
   b. \(\sin \alpha = x/r\)  
   c. \(\tan \beta = y/x\)  
   d. \(\sin \beta = \cos \alpha\)

4. \(\log_{10}x = 3, \log_{10}y = 1\)
   a. \(x/y = 0.3\)  
   b. \(x/y = 2\)  
   c. \(x/y = 3\)  
   d. \(x/y = 100\)