

Physics 2205
Quiz 2

26 August, 1999

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. $x = (6-b)/a$ c. $x = [(6-b)/a]^{1/2}$

b. $x = 6/a - b$ d. $x = (6+b)^{1/2} / a$

2. The surface area of a sphere of radius r is:

a. $A = \pi r^2$ c. $A = (4/3) \pi r^3$

b. $A = 4 \pi r^2$ 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. $x/y = 0.3$ c. $x/y = 3$

b. $x/y = 2$ d. $x/y = 100$