MATH 251, Section _____   Quiz#2 (Section 11.5).
Thursday, Sept. 12, 2013   Dr. M. Vorobets
Due Tuesday, Sept. 17, 2013 at the beginning of class.

NAME (print): _____

**No credit for unsupported answers will be given. Clearly indicate your final answer.
Staple all the sheets.**

1. *[3 pts.]* Consider the quadric surface $x = 4z^2 + y^2$. Find the traces (write **equations** and the **names** of the curves) of this surfacein the planes

   (a) $x = 4$:

   (b) $y = 2$:

   (c) $z = 0$:

2. *[2 pts.]* Classify the surface $y = 4x^2 + z^2$ and sketch it.

[more problems on back]

3. *[3 pts.]* Consider the quadric surface $z^2 = 4 + x^2 + 4y^2$. Find the traces (write **equations** and the **names** of the curves) of this surfacein the planes

   (a) $z = 3$:

   (b) $x = 2$:

   (c) $y = 0$:

4. *[2 pts.]* Classify the surface $4z^2 - x^2 - y^2 = 1$ and sketch it.