

MATH 251, Section 506, 507, 508
Thursday, Sept. 12, 2013
Due Tuesday, Sept. 17, 2013 at the beginning of class.

Quiz#2 (Section 11.5).
Dr. M. Vorobets

NAME (print): KEY

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 surface in the planes

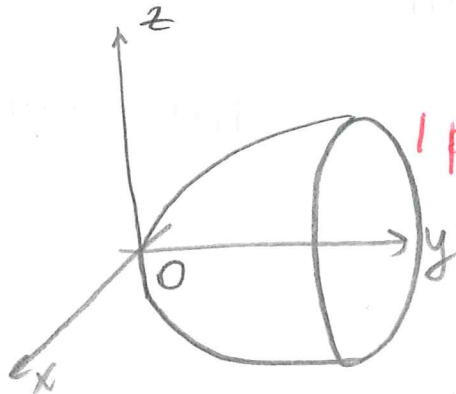
(a) $x = 4$: $4 = 4z^2 + y^2$ ellipse

(b) $y = 2$: $x = 4z^2 + 4$ parabola

(c) $z = 0$: $x = y^2$ parabola

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

elliptic paraboloid 1pt



1pt for the graph.