Student ID:

MATH201, Section 2 Fall 2018, Term 181 Instructions: Show Your Work! Quiz 3 Version A Student Name: <u>Serial Number:</u>

1. (5 pts) Find an equation of the plane that passes through the point (3, 1, 4) and contains the line of intersection of the planes

$$x + 2y + 3z = 1$$
 and $2x - y + z = -3$

2. (5 pts) For the surface

$$9y^2 + 4z^2 = x^2 + 36$$

(a) Find the vertical and horizontal traces.(b) Identify it.

Student ID:

MATH201, Section 3 Fall 2018, Term 181 Instructions: Show Your Work!

1. (5 pts) Find an equation of the plane that passes through the line of intersection of the planes

x-z=1 and y+2z=-3

and is perpendicular to the plane

x + y - 2z = 1

Quiz 3 Version B

2. $(5 \, \mathrm{pts})$ For the surface

$$9x^2 + 4z^2 = y^2 + 36$$

- (a) Find the vertical and horizontal traces.
- (b) Identify it.

Student Name: Serial Number: