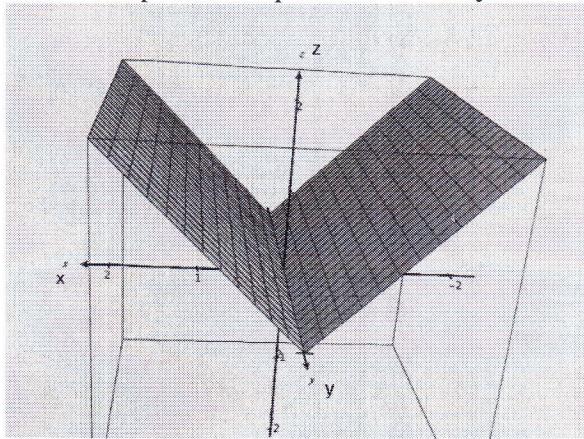


The Campus I plan to take my tests on is _____

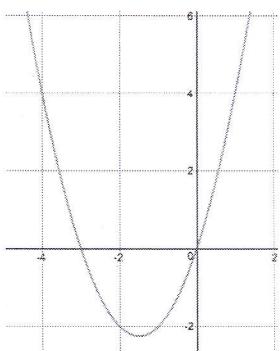
1. Give an example, in words, of any multi-variable function. Example: BMI(Body Mass Index) is a function of a person's height and weight.

2. Write a possible equation for the cylinder shown below:

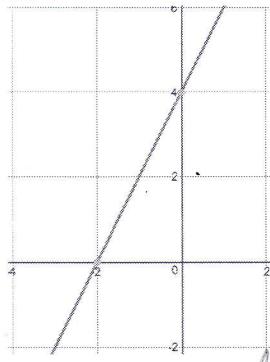


$z = |x|$
stretched along the
y-axis.

3. Consider the function $f(x,y) = x^2 + xy$. Cross sections of this function are shown below. Label each as either: "x - fixed" or "y-fixed".



y - fixed



x - fixed

4. Which of the following could be the contour diagram for $z = f(x,y) = \sqrt[3]{y} - x$? See the next page. Just give the correct letter of your choice. You don't need to send the second page.

D

$$z = \sqrt[3]{y} - x$$

$$z + x = \sqrt[3]{y}$$

$$(x + c)^3 = y$$