

Math 99 Worksheet #2
April 13, 2007

1. Is $(4, 5, 3)$ a solution to the system $2x - 3y + 2z = 1$?
$$x + 2y + z = 17$$
$$2y - z = 7$$

2. A coffee shop sells regular doughnuts for \$.80 and pink-frosted doughnuts for \$1.35. On a particular day, 24 more pink-frosted doughnuts are sold than regular doughnuts and the shop had \$94.75 in total doughnut sales. How many of each type of doughnut was sold that day? Which doughnut is tastier?

3. Two cheetahs leave a tree at the same time. One travels north and the other, going 20 mph faster than the northbound cheetah, travels south. After 3 hours of running at a constant speed, the cheetahs are 390 miles apart. Find the speeds of the two cheetahs.

4. Graph each inequality on a number line.
 - (a) $a \geq 5$
 - (b) $x < -2$
 - (c) $-3 < y \leq 2$