

# Math 220 Assignment

September 14, 2001

## Assignment for Friday, September 21

1. Prepare for a short quiz.
2. Let  $R(s, t)$  be the function from  $\mathbf{R}^2$  to  $\mathbf{R}^3$  defined by

$$R(s, t) = (s + 2t, -2s - t, -2s + 2t) \ .$$

- (a) Find equation(s) that characterize the set  $S$  of all points  $(x, y, z)$  in  $\mathbf{R}^3$  that arise as  $R(s, t)$  for at least one pair  $(s, t)$ .
- (b) What kind of subset of  $\mathbf{R}^3$  is  $S$ ?

Document network location for HTML:

<http://math.albany.edu:8000/math/pers/hammond/course/mat220/assgt/1a010912.html>