1.(1 pt)
Find the limit, if it exists, or type N if it does not exist.

$\lim_{(x,y)\to(0,1)} e^{\sqrt{2x^2+5y^2}} =$ _____

2.(1 pt)
Find the limit, if it exists, or type N if it does not exist.

$\lim_{(x,y)\to(0,0)} \frac{5x^2}{3x^2+3y^2} =$ _____

3.(1 pt)
Find the limit, if it exists, or type N if it does not exist.

$\lim_{(x,y)\to(0,0)} \frac{(x+2y)^2}{x^2+2^2y^2} =$ _____

4.(1 pt)
Find the limit, if it exists, or type N if it does not exist.
(Hint: use polar coordinates.)

$\lim_{(x,y)\to(0,0)} \frac{1x^3+3y^3}{x^2+y^2} =$ _____

5.(1 pt)
Find the limit, if it exists, or type N if it does not exist.

$\lim_{(x,y,z)\to(5,5,5)} \frac{2ze^{x^2+y^2}}{5x^2+5y^2+5z^2} =$ _____

6.(1 pt)
Find the limit, if it exists, or type N if it does not exist.

$\lim_{(x,y,z)\to(0,0,0)} \frac{1xy+2yz+4xz}{1x^2+4y^2+16z^2} =$ _____