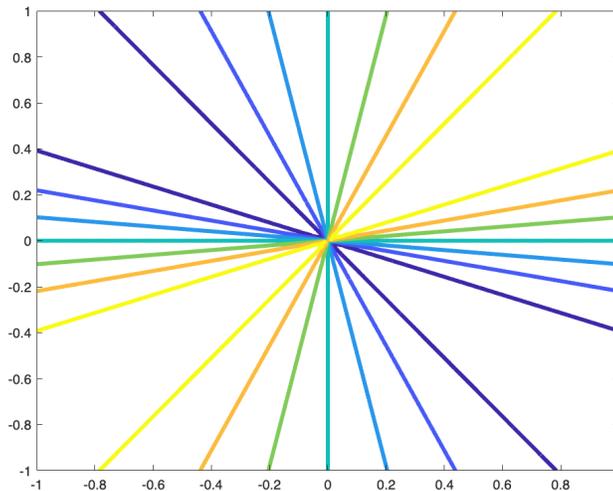


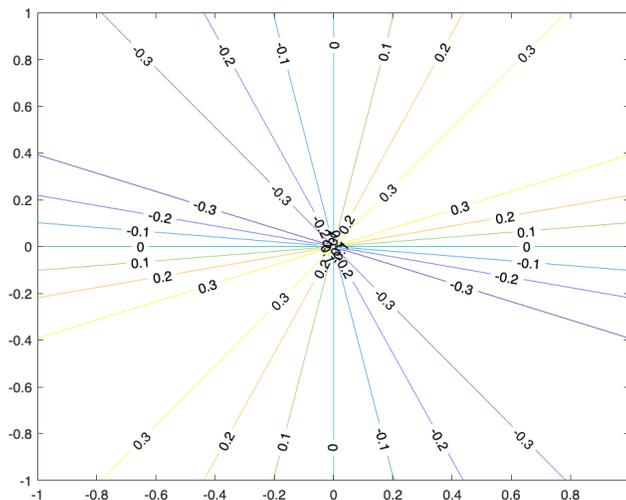
Limit Example

$$\text{Plot } f(x, y) = \frac{xy}{x^2 + 2y^2} \text{ if } (x, y) \neq (0, 0)$$

```
f = @(x,y) ((x .* y)./(x.^2 + 2 * y.^2)) .* (x.^2 + y.^2 ~= 0);  
[X,Y] = ndgrid(linspace(-1,1,150));  
contour(X, Y, f(X,Y), 'LineWidth',3)
```



```
contour(X,Y,f(X,Y), 'ShowText', 'on')  
hold off
```



```
surf(X, Y, f(X,Y))  
grid on  
shading('interp')
```

