



$$\frac{e^{x^2+y^2} - 1}{x^2 + y^2} \quad \frac{xy(x^2 - y^2)}{x^2 + y^2} \quad \frac{x^2}{x^2 + y}$$

$$\frac{1}{(x^2 - 1)^2 + (y^2 - 1)^2} \quad \sec(xy) \quad \tan^{-1}\left(\frac{y}{x}\right)^2$$

1. Match the functions with their contour plots.
2. Where are the discontinuities of each function? Show on the plots and also calculate exactly.