> #Linear stability domain for explicit 3 stage RK method of order 3

> restart;

> with(plots):

Warning, the name changecoords has been redefined

> r:=1+z+1/2*z^2+1/6*z^3;

$$r := 1 + z + \frac{1}{2} z^2 + \frac{1}{6} z^3$$

> z:=x+I*y;

$$z := x + I y$$

> contourplot(abs(r),x=-3..3,y=-3..3,contours=[1],
     numpoints=1000,axes=boxed,view=[-3..3,-3..3]);