Let
$$f(x, y) = \frac{6x^3y}{2x^4 + y^4}$$
, and consider $\lim_{(x,y) \to (0,0)} f(x, y)$.

- 1. Find the limit as you approach the origin along the x-axis.
- 2. Find the limit as you approach the origin along the *y*-axis.
- 3. Find the limit as you approach the origin along the line y = x.
- 4. Find the limit as you approach the origin along the line y = mx.



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Math 236 Multivariable Calculus