

Limiti in più variabili

7 ottobre 2017

1. $\lim_{(x,y) \rightarrow (0,0)} \frac{\sin(x-y)}{|x|+|y|}$ [#]
2. $\lim_{(x,y) \rightarrow (1,1)} \frac{x^3y^3-1}{xy-1}$ [3]
3. $\lim_{(x,y) \rightarrow (1,1)} \frac{x-y}{x^2-y^2}$ [$\frac{1}{2}$]
4. $\lim_{(x,y) \rightarrow (0,0)} \frac{x^3-y^4}{|x|+y^6}$ [#]
5. $\lim_{(x,y) \rightarrow (0,0)} \frac{x-y}{x}$ [#]
6. $\lim_{(x,y) \rightarrow (1,0)} \frac{xy^2}{(x-1)^2+y^2}$ [#]
7. $\lim_{(x,y) \rightarrow (0,0)} \frac{xy}{\sqrt{x^2+y^2}}$ [0]
8. $\lim_{(x,y) \rightarrow (0,0)} \frac{x^3+y^3}{x^2+y^4}$ [#]
9. $\lim_{(x,y) \rightarrow (1,2)} \frac{2x^2-xy}{4x^2-y^2}$ [$\frac{1}{4}$]
10. $\lim_{(x,y) \rightarrow (0,0)} \frac{\sin^2(xy)}{x^2+y^2}$ [0]
11. $\lim_{(x,y) \rightarrow (0,0)} \frac{x \sin(xy)}{x^2+y^2}$ [0]
12. $\lim_{(x,y) \rightarrow (0,1)} \frac{x^2\sqrt{2-x^2-y^2}}{x^2+(y-1)^2}$ [#]
13. $\lim_{(x,y) \rightarrow (0,0)} \frac{x^2y^3}{x^4+y^4}$ [0]

$$14. \lim_{(x,y) \rightarrow (0,0)} \frac{\arctan(x+y)}{\sqrt{x^2+y^2}} \quad [\#]$$

$$15. \lim_{(x,y) \rightarrow (0,0)} \frac{x^2+y^2}{x} \quad [\#]$$

$$16. \lim_{(x,y) \rightarrow (0,0)} \frac{x^2+y^2-x^3y^3}{x^2+y^2} \quad [1]$$