42

Try using the *norm* function from numpy.linalg

d = norm(np.cross(p2-p1, p1-p3))/norm(p2-p1)

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* 18

Should be np.abs(np.cross(p2-p1, p1-p3)) / norm(p2-p1))? – [nn0p](https://stackoverflow.com/users/661935/nn0p) [Apr 27 '18 at 18:34](https://stackoverflow.com/questions/39840030/distance-between-point-and-a-line-from-two-points#comment87153106_39840218)

* 2

unsupported operand type(s) for -: 'tuple' and 'tuple'? What's this? – [Frank](https://stackoverflow.com/users/5690644/frank) [Sep 10 '18 at 7:21](https://stackoverflow.com/questions/39840030/distance-between-point-and-a-line-from-two-points#comment91453057_39840218)

* 3

you need to convert the points to numpy arrays. This can be done like so: p1 = np.asarray(p1) – [brad](https://stackoverflow.com/users/6674213/brad) [Oct 15 '18 at 18:02](https://stackoverflow.com/questions/39840030/distance-between-point-and-a-line-from-two-points#comment92561701_39840218)

* 2

abs((x2-x1)\*(y1-y0) - (x1-x0)\*(y2-y1)) / np.sqrt(np.square(x2-x1) + np.square(y2-y1)) I used it this way, and it gave me the same answer in python – [id101112](https://stackoverflow.com/users/2298012/id101112) [Oct 23 '18 at 19:34](https://stackoverflow.com/questions/39840030/distance-between-point-and-a-line-from-two-points#comment92820713_39840218)

* 2

Does this assume the line extends to infinity, or the distance it generates become larger as points P3 grow farther away from the endpoints of the line segment generated by P1,P2? – [Cloud](https://stackoverflow.com/users/1022889/cloud) [Feb 19 '19 at 15:49](https://stackoverflow.com/questions/39840030/distance-between-point-and-a-line-from-two-points#comment96320274_39840218)