



If the distant star is a long way away, the red and blue dotted lines are almost parallel.

This means that: **angle a + angle b = 2 x angle p**

So, if we add our observed angles a and b and divide by 2, we get **angle p**, which is called the **parallax angle**.

The **tangent of angle p** (in degrees) =  $\frac{1}{2}$  base length / distance to object, meaning:

**Distance to object =  $\frac{1}{2}$  base length / (Tan p)**

### ALTERNATIVELY, USE OUR PARALLAX DISTANCE CALCULATOR

If maths isn't your thing, use our parallax distance calculator spreadsheet to work out how far away your object is. Just enter the two angles (a and b) you measure from point A and point B (in degrees), then enter the distance between A and B (the length of your stick, in metres) as shown in the yellow cells in the example below.

Angle a (deg)	Angle b (deg)	Base length AB (m)
5.5	5.5	1.6
The distance to the object is 8.3 metres		

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