



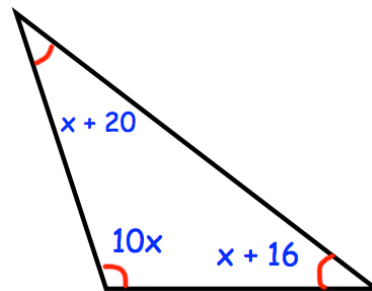
Factorise

$$x^2 - 2x - 3$$

Factorise

$$x^2 - x - 132$$

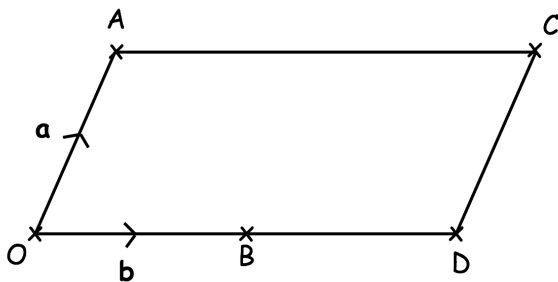
Find the size of the largest angle.



A helicopter takes off from an airport and then flies 200 miles East and then 40 miles North.

The helicopter then flies directly back to the airport.

How far does the helicopter fly in total?



OACD is a parallelogram.
B is the midpoint of OD.

$$\vec{OA} = \mathbf{a} \quad \vec{OB} = \mathbf{b}$$

Express in terms of \mathbf{a} and \mathbf{b} , the vector \vec{OC}

Express in terms of \mathbf{a} and \mathbf{b} , the vector \vec{OD}