



Prove that the angles in a triangle add up to  $180^\circ$ .

Hint: consider parallel lines.

A boat sails 4 miles North from A to B. Then the boat sails 5 miles North-East from B to C. The boat then sails directly back to A.

How far does the boat sail in total?

Rationalise the denominator of

$$\frac{2 + \sqrt{3}}{\sqrt{5} - 1}$$

$x$  is an obtuse angle.

Given

$$\sin(x) = \frac{5}{13}$$

Find  $\cos(x)$

Expand and simplify

$$(1 + \sqrt{2})(1 + \sqrt{3})(2 - \sqrt{3})$$