



The pressure of a tyre is 32 pounds per square inch.

Given 1 pound = 0.4536 kilograms

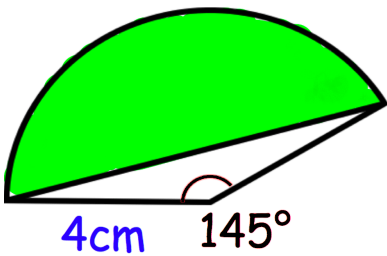
1 inch = 2.54 centimetres

Work out the pressure in grams per square centimetre.

Given

$$(x + a)^2(x - 2) = x^3 + bx^2 + 12x - 72$$

Find a and b



Find the area of the segment

Isla has a box of counters.

		Shape		
		Circle	Triangle	Square
Colour	Blue	6	2	5
	Red	8	9	11

Isla picks two counters at random. Calculate the probability that the two counters are different colours.

The first 4 terms of a sequence are:

800, 790, 775, 755, ...

Which term is the first to be negative?