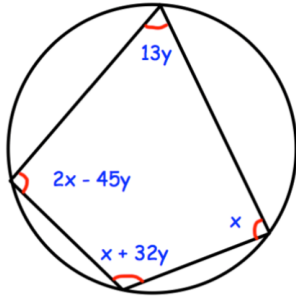


20th September

Corbettmaths

Prove $(n + 6)^2 - (n + 2)^2$ is always a multiple of 8



Find x and y .

The volume of gas V is inversely proportional to the pressure p .

By what percentage will the pressure of the gas change if its volume is increased by 30%

Solve the inequality $x^2 - x - 30 \geq 0$

Julie has an empty container. She puts some white, yellow and green counters into the box. The ratio of white to yellow to green counters is 2:2:1. Julie takes at random, 2 counters from the box, one at a time, without replacement. The probability that she takes two yellow counters is $\frac{1}{7}$

How many counters did Julie put in the box?