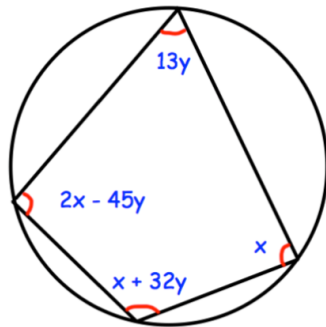




Prove  $(n + 6)^2 - (n + 2)^2$  is always a multiple of 8



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 puts some white, yellow and green counters into an empty 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?