

WORKSHEET-3

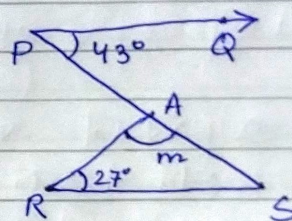
* Note for students - Students must complete it in their class work copy.

Q1.) Factorise (i) $x^4 - 625$ (ii) $a^3 + b^3 + a + b$.

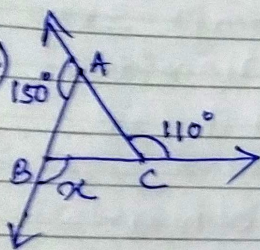
Q2.) Find $p(0)$, $p(1)$ and $p(-2)$ for the following polynomials.

(i) $p(x) = 10x - 4x^2 - 3$ (ii) $p(y) = (y+2)(y-2)$

Q3.) In the given figure, if $PQ \parallel RS$, then find the value of m or $\angle RAS$. Also given $\angle P = 43^\circ$, $\angle R = 27^\circ$.



Q4.) Find the value of x from the given figure.



Q5.) If one angle of a triangle is equal to the sum of the other two angles, then show that the triangle is a right angled triangle.

Q6.) The sides of a triangle are x , $x+1$, $2x-1$ and its area is $x\sqrt{10}$. Find the value of x .

Q7.) The adjacent sides of a parallelogram ABCD, are $AB = 34\text{cm}$, $BC = 20\text{cm}$ and diagonal $AC = 42\text{cm}$. Find the area of the parallelogram.

Q8.) How many zeros does a cubic polynomial have?