

SATISH CHANDRA MEMORIAL SCHOOL
 CLASS - IX CHAPTERS - POLYNOMIALS, HERON'S FORMULA
 LINES AND ANGLES

WORKSHEET - 4

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

Q1) Find k, if $(x^{51} + 2x^{60} + 3x)$ is divisible by $(x+1)$

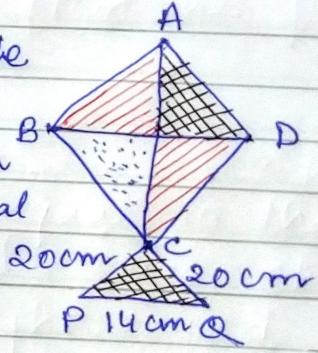
Q2) If $(x^{21} - 20)$ is divisible by $(x+1)$, find the remainder.

Q3) Factorise the following polynomials:-

$$(i) 2x^2 + 7x + 3 \quad (ii) x^2 - 5x + 6$$

Q4) The perimeter of a rhombus is 20 cm and one of its diagonal is 6 cm long. Find the length of the other diagonal.

Q5) How much paper of each shade is needed to make a kite given in the figure, in which ABCD is a square with diagonal 44 cm and an isosceles $\triangle CPQ$ of base 14 cm and sides 20 cm each, is to be made of 3 different shades (, , ) as shown in the figure.



Q6) Find the area of regular hexagon of side a cm.

Q7) If two supplementary angles are in the ratio of 11:7, then find the angles.

Q8) If angles a and b form a linear pair of angles and $a - 2b = 30^\circ$, then find a and b.