ST. LAWRENCE HIGH SCHOOL

TOPIC –Properties of Parallelogram

Subject : Mathematics **Class-9** **First termF. M. 15**

WORKSHEET NO. - 15 **Solutions** **Date: 06.03.2021**

Q.1) Choose the correct option: (1x15=15)

i) PQRS is a parallelogram whose sides PQ = 4x + y, QR = 13, RS = 21 and SP = 3x – 2y, then
a) x = 5, y = 1

ii) PQRS is a rhombus whose one diagonal is PR. If /RPQ = 35°, then /RSP =
c)110°

iii) The diagonal of a rectangle makes an angle of 30° with one of its side. Then the acute angle between the diagonals is
c) 60°

iv)In a parallelogram ABCD , AB = 6cm and the length of the diagonals AC and BD are 9.8 cm and 8.2 cm. If the diagonals AC and BD intersect at O, then the perimeter of Δ AOB is
b) 15 cm

v)The length of the side of a rhombus is 10 cm and if the length of one diagonal is 6 cm, then the length of the other diagonal is
d)12 cm

vi) The perimeter of a parallelogram is 25cm. If the length of its greater side is is 7.5 cm, then the length of its smaller side will be
a) 5 cm

vii)ABCD is a square. BOC is an equilateral triangle where the point O is outside the square. Then the value of /AOD will be
c)30°

viii)In the rectangle PQRS, the diagonals PR and QS intersect at O. If /PQS = 50°, then the value of /SOR is
d) 80°

ix) In a rhombus PQRS, the diagonals PR and QS intersect at O. If /PRS = 50°, then /OSR is _____
b) 40°

x)In a parallelogram PQRS, the ratio of /PQR and /QRS is 1 : 5, then the value of /QPS and /PSR are ___ and ___
b)100°,80°

xi)In a parallelogram ABCD, the point of intersection of diagonals AC and BD is O. If /AOD = 120°, and /BAC = 2/ABD, then the value of /BCD is
a) 80°

xii)QS is a diagonal of a parallelogram PQRS. If PQ > QR then /QSR is _____ than /PSQ
a)less

xiii) ABCD is a rhombus. If /ABD = 40°, then the value of /BCD is _____
d)100°

xiv) If the measure of an angle of a parallelogram is half of its complementary angle, then the complementary angle is
b) 120°

xv) PQT is a equilateral triangle on the side PQ of a rhombus PQRS. If /QRS = 78°, then the value of /PST is
c)21°

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