CLASS 9

WORKSHEET 2

QUADRILATERALS

Q1) SHOW THAT LINE SEGMENT JOINING THE MID POINT OF OPPOSITE SIDES OF A QUADRILATERAL BISECT EACH OTHER ?

Q2) PROVE THAT THE DIAGONALS OF A PARALLELOGRAM DIVIDES IT INTO TWO CONGRUENT TRIANGLES ?

Q3) IN A TRIANGLE THE LINE SEGMENT JOINING THE MID POINT OF ANY TWO SIDES OF A TRIANGLE IS PARALLEL TO THE THIRD SIDE AND HALF OF IT . PROVE IT ?

Q4) PROVE THAT THE DIAGONALS OF A RHOMBUS BISECT EACH OTHER AT RIGHT ANGLE ?

Q5) PROVE THAT THE STRAIGHT LINE JOINING THE MID POINT OF THE DIAGONAL OF A TRAPEZIUM IS PARALLEL TO THE PARALLEL SIDES ?

Q6) ABCD IS A RECTANGLE THE DIAGONAL BD BISECT ANGLE B. SHOW THAT ABCD IS A SQUARE ?

Q7) IN A RHOMBUS ABCD , SHOW THAT DIAGONAL AC BISECT ANGLE A AS WELL AS ANGLE C ?

Q8) IN TRAPEZIUM ABCD AB ll DC AND AD = BC . SHOW THAT ANGLE A = ANGLE B?

Q9) P,Q,R AND S ARE MID POINT OF SIDES AB, BC ,CD AND DA RESPECTIVELY OF RECTANGLE ABCD.SHOW THAT PQRS IS A RHOMBUS ?

Q10) IN THE GIVEN FIGURE X AND Y ARE THE MIDPOINTS OF SIDE AB AND CD OF A PARALLELOGRAM ABCD .PROVE THAT:-

1. PXQY IS A PARALLELOGRAM
2. AXCY IS A PARALLELOGRAM