

UNIT 7 PRACTICE PROBLEMS – GT GEOMETRY BERNHARD Name _____

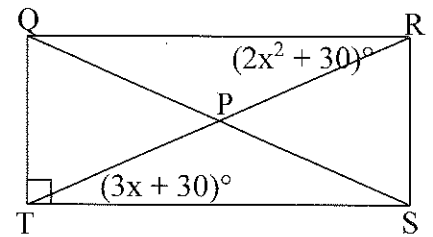
State whether each sentence is TRUE or FALSE. If false, change the UNDERLINED WORD to make it true.

- a) The diagonals of a rhombus bisect each other.
- b) The consecutive angles of a parallelogram are congruent.
- c) The diagonals of a kite are congruent.
- d) The sum of the exterior angles of a polygon is 360° .
- e) A rectangle is a regular quadrilateral.

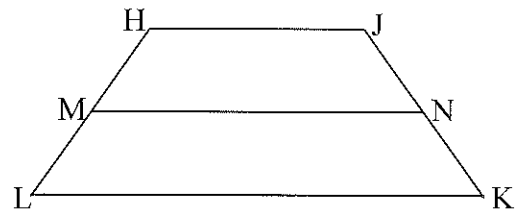
2. Quadrilateral QRST is a rectangle. Find each value or measure.

$x =$ _____

$m\angle RPS =$ _____

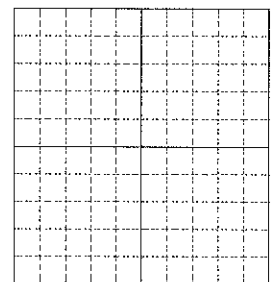


3. \overline{MN} is the median of trapezoid HJKL.



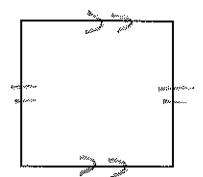
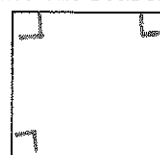
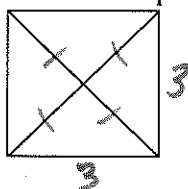
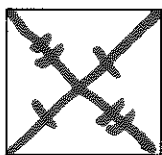
_____ Find HJ if $MN = 52$, $HJ = 6x + 6$, and $LK = 8x$.

4. Given: Quadrilateral KITE has vertices $K(-1, 1)$, $I(0, 2)$, $T(1, 1)$, and $E(0, -2)$. Prove: KITE is a kite. (YOUR WORK WILL BE YOUR JUSTIFICATION!!)



5. Rhombus ABCD has a perimeter of 52. If $AC = 10$, find the length of BD .

6. Give the most specific name for each quadrilateral and state the reasons.



Quadrilaterals Hierarchy

Rhombus	Parallelogram	Trapezoid
Square	Quadrilateral	Rectangle
Kite	Isosceles Trapezoid	Polygon

