Chapter 6 Review - **MARTIAN DARTS**

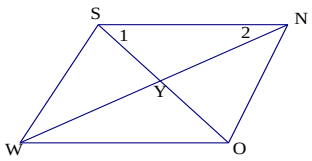
Part One: Parallelograms

Given: SNOW is a ▱

$m\angle NSW = 120°$

$m\angle NOY = 70°$

Find : $m\angle 1$

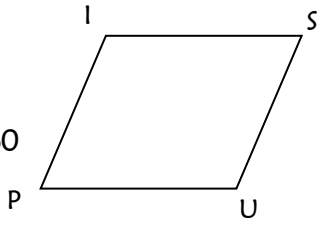


2. Given: ISUP is a ▱

$m\angle P = x^2 + x$

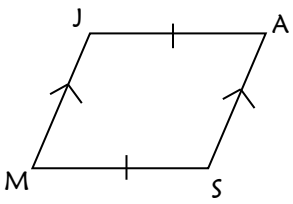
$m\angle I = -2x + 160$

Find: $m\angle U$

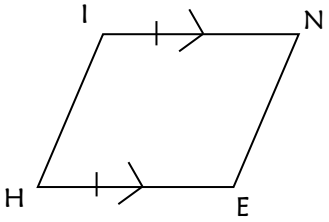


#3-5 Determine if the quadrilateral is a parallelogram or not.

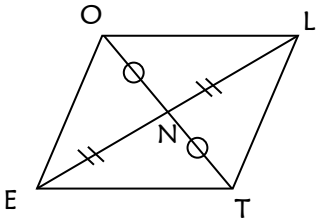
3. YES or NO



4. YES or NO



5. YES or NO

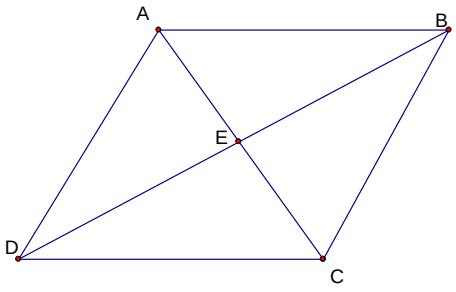


Part Two: Parallelogram Proof

6. Given: E is the midpt. of $\overline{AC}$

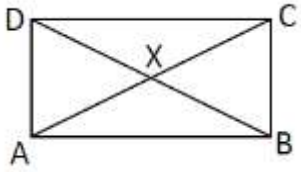
$\angle BAE \cong \angle DCE$

Prove: ABCD is a ▱

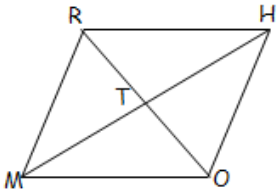


Part Three: Special Parallelograms

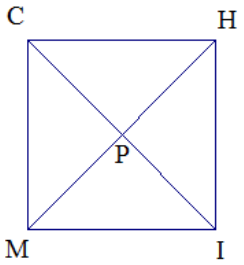
7. ABCD is a rectangle
   $AX = x^2$, $BX = 6x - 9$
   Find: AC



8. RHOM is a rhombus
   $m\angle RTH = 5x$
   $RH = 10x - 6$
   Find: RM



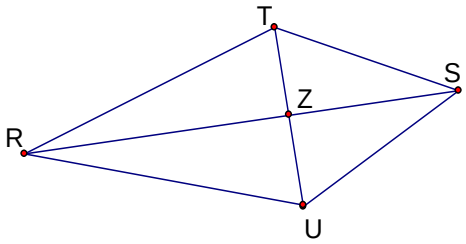
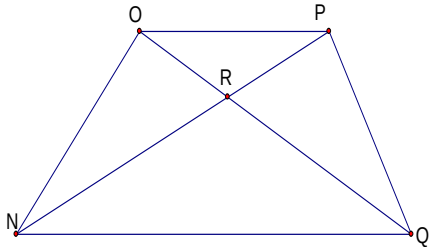
9. CHIM is a square
   $m\angle CHP = 9x$
   Find: x



Part FOUR: Kites and Trapezoids

10. Given: RTSU is a kite with ST = SU
    $RT = 4x + 5$
    $RU = 12x - 3$
    $TU = 10x - 1$

    Find: TZ



11. NOPQ is an isosceles trapezoid.
    $m\angle PQN = 80$
    $m\angle ONR = 10x - 2$
    $m\angle PNQ = 20x + 4$
    Find: x