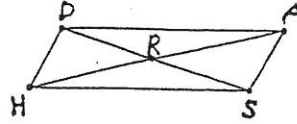


Signature: _____

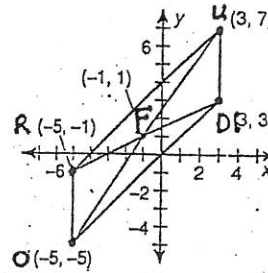
1-6, use the diagram of ▱ DASH.

- If $DA = 13$, then $HS =$ _____
- If $AS = 4.5$, then $DH =$ _____
- If $m\angle DHS = 65^\circ$, then $m\angle ASH =$ _____
- If $m\angle HDA = 120^\circ$, then $m\angle HSA =$ _____
- If $m\angle DAH = 44^\circ$, then $m\angle SHA =$ _____
- If $m\angle DHS = 110^\circ$ and $m\angle ASR = 32^\circ$, then $m\angle RSH =$ _____



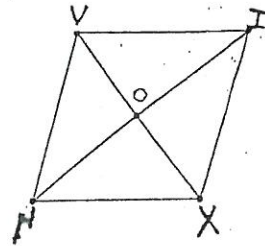
In # 7-10, use the diagram of ▱ RUDO.

- Use the distance formula to show that $RU = DO$.
Give the distance for each side.
- Find the slope of the equation of \overleftrightarrow{DO} .
- What is the slope of the line containing U and R?
- Determine whether or not the diagonals are congruent. Show the length of each.



In #11-17, decide whether each piece of given information alone is sufficient to prove quadrilateral VIXN is a parallelogram.

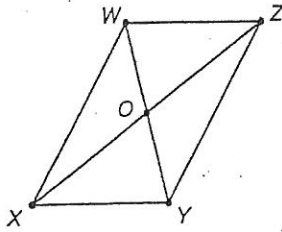
- O is the midpoint of \overline{VX} and \overline{NI}
- $\overline{VN} \parallel \overline{IX}$ and $\overline{NX} \cong \overline{VI}$.
- $\angle VNX + \angle NXI = 180^\circ$
- $\angle VNX \cong \angle VIX$ and $\angle IVN \cong \angle IXN$.
- $\triangle VNO \cong \triangle IXO$.
- $\triangle VNO \cong \triangle XIO$.
- $\overline{VI} \cong \overline{IX}$



#18 – 19, write a two-column proof.

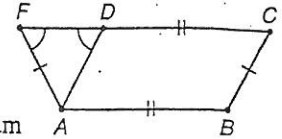
18. Given: $\square WXYZ$

Prove: $\triangle WOX \cong \triangle YOZ$



19. Given: $AB = CD$
 $BC = AF$
 $\angle AFD = \angle ADF$

Prove: ABCD is a parallelogram



#20-23, Draw each, if possible.

20. convex heptagon

21. regular quadrilateral

22. concave triangle.

23. concave pentagon

24. A polygon with 9 sides is termed a _____.

26. The point where two sides of a polygon meet is termed a _____.

27. The sum of the measures of the interior angles for a convex 26-gon is _____.

28. The measure of an exterior angle of a regular polygon is 45° ; therefore, it has _____ sides.

29. A regular polygon has 14 sides. the measure of its interior angles is _____ and its exterior angles is _____.

30. The measure of an interior angle of a regular polygon is 144° . How many sides? _____

31. What is the name of the polygon in #30 _____.

32. A regular pentagon's interior angle will measure _____ and exterior will be _____.