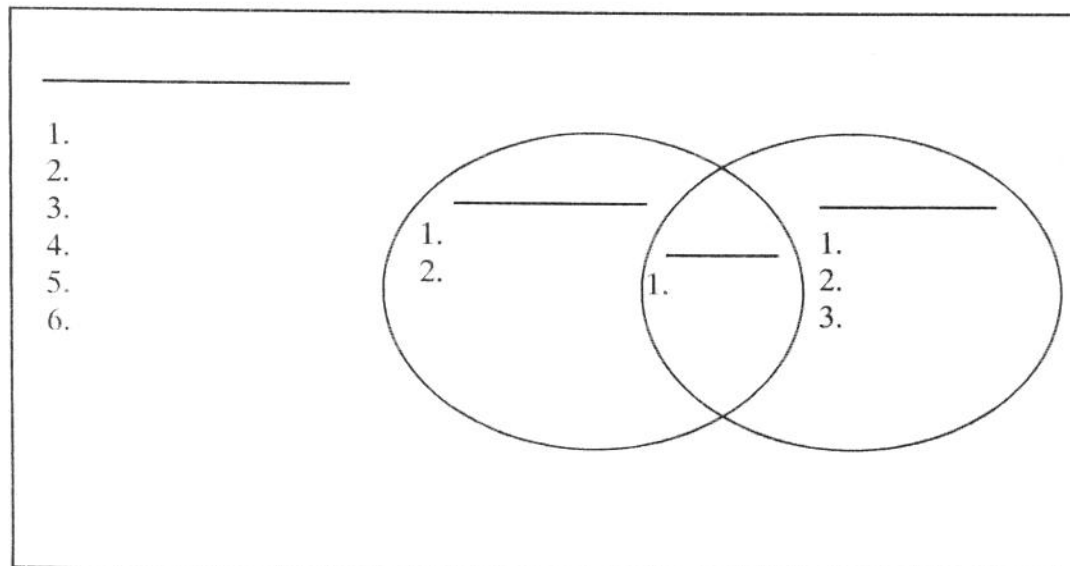


I. Using the word bank fill in the Venn diagram below.



Word Bank

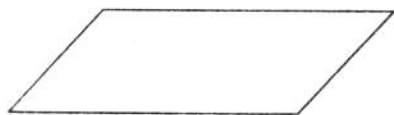
Parallelogram
opp. sides \cong
Rectangle
opp. sides \parallel
Rhombus
diagonals bisect each other
Square
 $4 \cong$ sides
opp. angles \cong
 4 right angles
diagonals \cong
diagonals \perp
properties of all others
diagonals bisect corners
consecutive angles supp.

II. Tell weather each statement is Always, Sometimes, or Never.

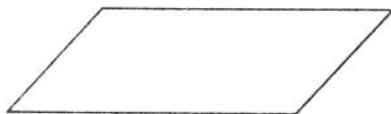
- _____ 1. A square is a parallelogram;
_____ 2. The diagonals of a parallelogram bisect each other.
_____ 3. A rectangle is a square.
_____ 4. A square is a rectangle.
_____ 5. The diagonals of a quadrilateral are \perp .
_____ 6. A parallelogram is a rhombus.
_____ 7. Each diagonal of a rhombus bisects the angles of the rhombus.
_____ 8. A square is a rhombus.
_____ 9. A rhombus is a square.
_____ 10. The diagonals of a rectangle are equal.

III. Draw a sketch of the figure described then answer the question.

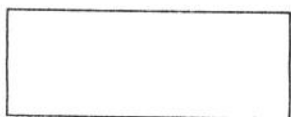
11. Parallelogram ABCD. If $m\angle A = 60$, find the $m\angle B$, $m\angle C$ and $m\angle D$.



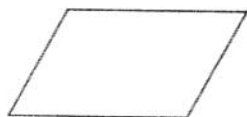
12. Parallelogram UVWX. If $m\angle U = 54$ and $m\angle V = p + 82$, find p and $m\angle X$.



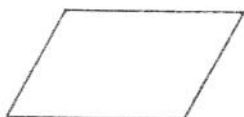
15. Rectangle CATS. Add diagonals CT and AS intersecting at M. If $CA = 25$ and $AS = 28$. Find MT and use Pythagoreans thm and find CS.



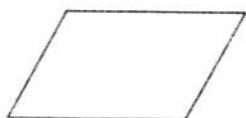
16. Rhombus BIRD. Add diagonal BR. If $m\angle IBR = 68$ find $m\angle BRI$.



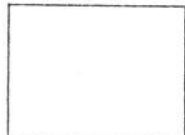
17. Rhombus ABCD. Add both diagonals intersecting at S. If $m\angle BAC = 81$ and $m\angle ASD = 3x - 12$ find x .



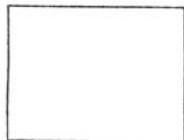
18. Rhombus ABCD. Add both diagonals intersecting at S. If $AC = 24$ and $BD = 10$, Find the perimeter of the rhombus. (hint: remember Pythagoreans thm.)



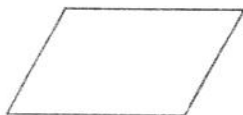
19. Square MNOP with diagonals intersecting at B. If $MN = 14$ find MO to the nearest hundredth. (hint: remember Pythagoreans thm.)



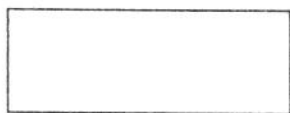
20. Square MNOP with diagonals intersecting at B. $m\angle PON = \underline{\hspace{2cm}}$ and $m\angle POM = \underline{\hspace{2cm}}$.



21. Rhombus ABCD. $BC = 4x + 18$ and $CD = 2x + 37$.



22. Rectangle ABCD with diagonals intersecting at M. If $AC = 58$, $BD = 5x - 1$, $BC = x = 2$, find x .



23. Rectangle ABCD with diagonals intersecting at M. If $m\angle BDA = 27$ and $BD = 30$, find the following:

$m\angle BDC = \underline{\hspace{2cm}}$, $m\angle ABD = \underline{\hspace{2cm}}$, $\angle CBD = \underline{\hspace{2cm}}$ $m\angle CAD = \underline{\hspace{2cm}}$ $m\angle BMC = \underline{\hspace{2cm}}$

$AC = \underline{\hspace{2cm}}$, $MB = \underline{\hspace{2cm}}$, $MC = \underline{\hspace{2cm}}$, $AM = \underline{\hspace{2cm}}$, $MD = \underline{\hspace{2cm}}$