## Geometry

WS PC \#3 Review (7.4-7.5)

1. Given $S P Q R$ is a trapezoid, find $m \angle R$.

2. Find each measure.
$m \angle F=$ $\qquad$
$m \angle D=$ $\qquad$

$m \angle E=$ $\qquad$
3. Polygon $A B C D$ is a kite. If $A B=12$ and $A D=4$, find the following:
$B C=$
$D C=$


Perimeter of $A B C D=$
4. The figure below is a kite. Find $a$.

5. If $K M=22$, find $J L$.

6. The perimeter of the kite is 116 cm . Find $x$.

7. $A R T P$ is an isosceles trapezoid with $R A=P T$. Find $w, x$, and $y$.

8. $\quad$ Find $x$ and $y$.

9. $F L Y E$ is a kite and $F L=L Y$. Find $w, x$, and $y$.

10. Find $x$ and $y$.

11. Complete the following chart by putting checks in the boxes that are true.

|  | 4 Sides | Opp. Sides \\|I | Opp. Sides $\cong$ | All Sides $\cong$ | Opp. Angles $\cong$ | All Angles $\cong$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1. Parallelogram |  |  |  |  |  |  |
| 2. Rectangle |  |  |  |  |  |  |
| 3. Rhombus |  |  |  |  |  |  |
| 4. Square |  |  |  |  |  |  |


| The diagonals .... | bisect each other | are congruent | bisect opposite angles | are perpendicular |
| :--- | :--- | :--- | :--- | :--- |
| 5. Parallelogram |  |  |  |  |
| 6. Rectangle |  |  |  |  |
| 7. Rhombus |  |  |  |  |
| 8. Square |  |  |  |  |

Determine if the statement is true or false.
12. $\qquad$ All quadrilaterals are parallelograms.
13. $\qquad$ All parallelograms are quadrilaterals.
14. $\qquad$ A square is a parallelogram.
15. $\qquad$ A parallelogram with a right angle is a square.
16. $\qquad$ All rectangles are parallelograms.
17. $\qquad$ All rhombuses are squares.
18. $\qquad$ All squares are rectangles.
19. $\qquad$ A parallelogram with four congruent sides is a square.
20. $\qquad$ A parallelogram with perpendicular diagonals is a square.

For $21-23$, find the measure of the numbers angles in the figures.
21. $A B C D$ is a rectangle

$\qquad$ $m \angle 2=$ $\qquad$ $m \angle 3=$ $\qquad$ $m \angle 4=$ $\qquad$
$m \angle 5=$ $\qquad$ $m \angle 6=$ $\qquad$ $m \angle 7=$ $\qquad$
$\qquad$
$m \angle 8=$
$m \angle 9=$ $\qquad$ $m \angle 10=$ $\qquad$ $m \angle 11=$ $\qquad$ $m \angle 12=$ $\qquad$
$m \angle 13=$ $\qquad$ $m \angle 14=$ $\qquad$

