Acc: Parallelograms and Special Parallelograms Practice Pg 329

Complete each statement about $\square A B C D$. Justify your answer.
15. $\angle D A B \cong$ ? .
16. $\angle A B D \cong$ ? $\qquad$
17. $\overline{A B} \|$ ?
18. $\overline{B G} \cong$ ?
19. $\triangle A B D \cong$ ?
20. $\angle A C D \cong$ ?


ALGEBRA Use $\square M N P R$ to find each measure or value. Round to the nearest tenth if necessary.
21. $m \angle M N P$
23. $m \angle R N P$
25. $m \angle M Q N$
27. $x$
29. $w$
22. $m \angle N R P$
24. $m \angle R M N$
26. $m \angle M Q R$
28. $y$
30.

Pg 345 ALGEBRA Quadrilateral JKMN is a rectangle.
7. If $N Q=5 x-3$ and $Q M=4 x+6$, find $N K$.

9. If $N M=8 x-14$ and $J K=x^{2}+1$, find $J K$.
10. If $m \angle N J M=2 x-3$ and $m \angle K J M=x+5$, find $x$.
11. If $m \angle N K M=x^{2}+4$ and $m \angle K N M=x+30$, find $m \angle J K \ddot{N}$.
12. If $m \angle J K N=2 x^{2}+2$ and $m \angle N K M=14 x$, find $x$.
13. $m \angle 2$
14. $m \angle 3$
15. $m \angle 4$
16. $m \angle 5$
17. $m \angle 6$
19. $m \angle 8$
20. $m \angle 9$
18. $m \angle 7$
21. $m \angle 12$


Pg 351

ALGEBRA In rhombus $A B C D, A B=2 x+3$ and $B C=5 x$.
2. Find $x$.
3. Find $A D$.
4. Find $m \angle A E B$.
5. Find $m \angle B C D$ if $m \angle A B C=83.2$.


## Complete the following on a separate paper and show all of your work!

COORDINATE GEOMETRY Given each set of vertices, determine whether $\square$ MNPQ is a rhombus, a rectangle, or a square. List all that apply. Explain your reasoning.
6. $M(0,3), N(-3,0), P(0,-3), Q(3,0)$
7. $M(-4,0), N(-3,3), P(2,2), Q(1,-1)$

PROOF Write a two-column proof.
11. Given: $\triangle W Z Y \cong \triangle W X Y$, $\triangle W Z Y$ and $\triangle X Y Z$ are isosceles.
Prove: $W X Y Z$ is a rhombus.

12. Given: $\begin{aligned} & \triangle T P X \cong \triangle Q P X \cong \\ \text { Prove: } & \triangle Q R X \cong \triangle T R X \\ & T P Q R \text { is a rhombus. }\end{aligned}$

$\begin{aligned} \text { 13. Given: } & \triangle L G K \cong \triangle M J K \\ & G H J K \text { is a parallelogram. } \\ \text { Prove: } & G H J K \text { is a rhombus. }\end{aligned}$

14. Given: $Q R S T$ and $Q R T V$ are rhombi.

Prove: $\triangle Q R T$ is equilateral.


Use the Venn diagram to determine whether each statement is always, sometimes, or never true.
30. A parallelogram is a square.
31. A square is a rhombus.
32. A rectangle is a parallelogram.
33. A rhombus is a rectangle but not a square.


