Geometry B Reddy _____ Name

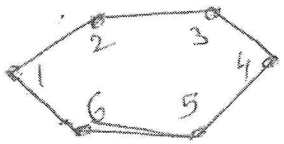
Chapter 8 Quadrilaterals

	Date	Section	Topic	Page and #	Worksheet/ Quiz
1.	_____	8.1	Angles of Polygons *(n – 2) 180*	P510-11 #5-15(o),18,20,24 P513 #39-47	
2.	_____	8.2	Parallelograms	P518 #4-15,23-28,30*,31* P521 #46,50,56,1-6	**Practice 8.1-8.2** **Quiz 1**
3.	_____	8.3	Parallelograms	P526 #10,12,20,21	
4.	_____	8.4	Rhombus, Rectangle, Square	P537 #19-24,26,29,33-49 (o) P540 #65,66	**Practice 8.3-8.4** **Quiz 2**
5.	_____	8.5	Trapezoid & Kite	P546 #7,11,13,21,25*,26*,45,46	
6.	_____	8.6	Special Quadrilaterals	P554 #3-11 P557 #44-50, 1-3	**Practice 8.5-8.6** **Quiz 3**
7.	_____		Review	P561 #8-10,12,16 P562 #20,26,27 ✓ P564 #1-11	
8.	_____		Test		**Ch 8 Test B** **Ch8 Standardized Test**

8.1 ANGLE MEASURES IN POLYGONS

MR. REDDY'S NOTES

1. POLYGON INTERIOR ANGLE THEOREM:-



N=6

THE SUM OF THE MEASURES OF THE INTERIOR ANGLES OF A CONVEX N-GON IS $(N-2)\cdot 180^\circ$.

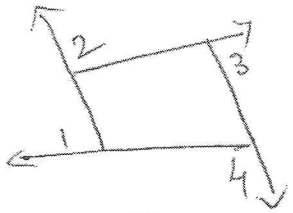
$m\angle 1 + m\angle 2 + \cdots + m\angle N = (N-2)\cdot 180^\circ$.

EX: IF N=4, $(4-2)\cdot 180^\circ = 2\cdot 180^\circ = 360^\circ$.

2. POLYGON EXTERIOR ANGLES THEOREM:-

THE SUM OF THE MEASURES OF THE EXTERIOR ANGLES OF A CONVEX POLYGON IS 360°.

$m\angle 1 + m\angle 2 + \cdots + m\angle N = 360^\circ$



N=4

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LESSON 8.1

Practice

For use with pages 506–513

Find the sum of the measures of the interior angles of the indicated convex polygon.

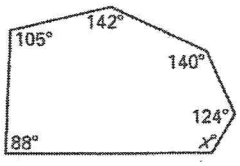
1. Hexagon
2. Dodecagon (12)
3. 11-gon

The sum of the measures of the interior angles of a convex polygon is given. Classify the polygon by the number of sides.

7. 180°
8. 540°
9. 900°

Find the value of x.

16.



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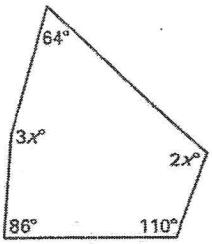

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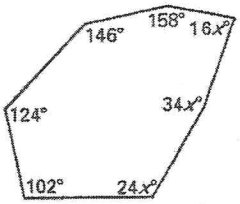

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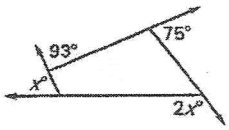

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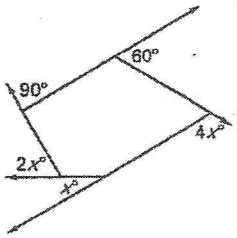

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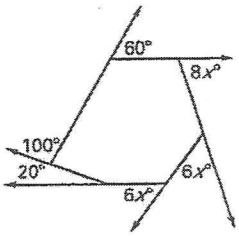


23. The measures of the exterior angles of a convex quadrilateral are 90°, $10x$°, $5x$°, and 45°. What is the measure of the largest exterior angle?

24. The measures of the interior angles of a convex octagon are $45x$°, $40x$°, 155°, 120°, 155°, $38x$°, 158°, and $41x$°. What is the measure of the smallest interior angle?

Find the measures of an interior angle and an exterior angle of the indicated polygon.

25. Regular triangle
26. Regular octagon
27. Regular 16-gon

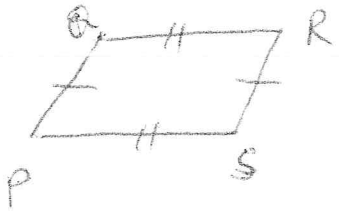
In Exercises 31–34, find the value of n for each regular n-gon described.

31. Each interior angle of the regular n-gon has a measure of 140°.

32. Each interior angle of the regular n-gon has a measure of 175.2°.

Mr.Reddy's Notes 8.2 Properties of Parallelograms (8.3)

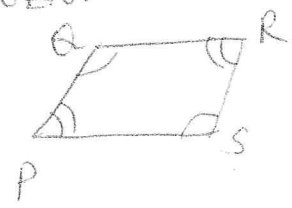
1. IF A QUADRILATERAL IS A PARALLELOGRAM, THEN ITS SIDES ARE CONGRUENT.



$\overline{PQ} \cong \overline{RS}$

$\overline{QR} \cong \overline{PS}$

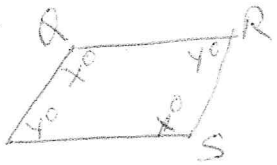
2. IF A QUADRILATERAL IS A PARALLELOGRAM, THEN ITS OPPO-SITE ANGLES ARE CONGRUENT.



$\angle P \cong \angle R$

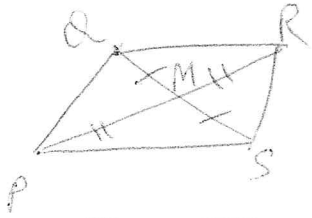
$\angle Q \cong \angle S$

3. IF A QUADRILATERAL IS A PARALLELOGRAM, THEN ITS CONSECUTIVE ANGLES ARE SUPPLEMENTARY.



$x° + y° = 180°$

4. IF A QUADRILATERAL IS A PARALLELOGRAM, THEN ITS DIAGONALS BISECT EACH OTHER.



$\overline{QM} = \overline{SM}$

$\overline{PM} \cong \overline{RM}$

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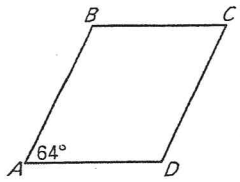
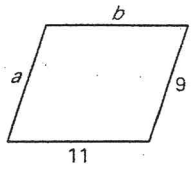
LESSON 8.2 **Practice**
For use with pages 514–521

1. Find $m\angle B$.



Find the value of each variable in the parallelogram.

4.



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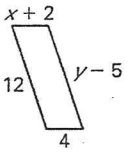

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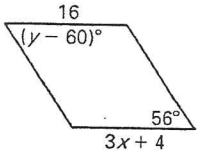

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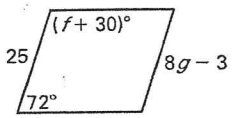

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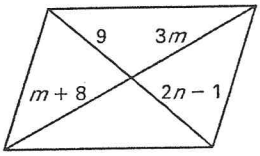

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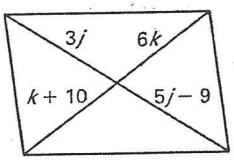


Find the indicated measure in $\square ABCD$.

12. $m\angle AEB$

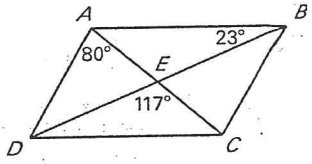
13. $m\angle BAE$

14. $m\angle AED$

15. $m\angle ECB$

16. $m\angle BAD$

17. $m\angle DCE$



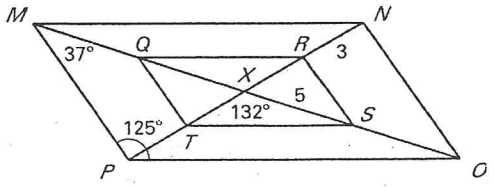
Use the diagram of $\square MNOP$. Points Q, R, S, and T are midpoints of $\overline{MX}$, $\overline{NX}$, $\overline{OX}$, and $\overline{PX}$. Find the indicated measure.

20. PN

21. MQ

22. XO

23. $m\angle NMQ$



29. In parallelogram $RSTU$, the ratio of RS to ST is $5:3$. Find RS if the perimeter of $\square RSTU$ is 64.