

Lesson 6-3L: Properties of Special Parallelograms

Agenda:

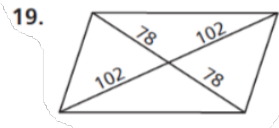
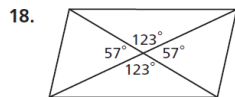
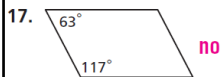
- Check & Review Homework 6-2
- Review for Quiz 6.1
- Take QUIZ

Homework:

- Complete Worksheet
- Remember: CR due Friday AND Test Replacement Points
- Midterm 1/12

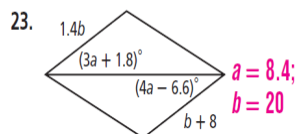
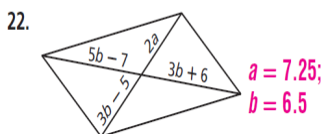
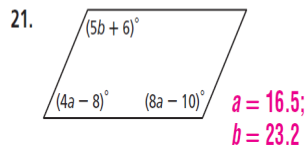
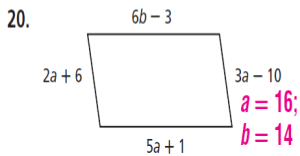
Homework 6-3: p. 402-404: #17-19,20-23, 26

Determine if each quadrilateral must be a parallelogram. Justify your answer.



19. Yes; the diags. of the quad. bisect each other. By Thm. 6-3-5, the quad. is a parallelogram.

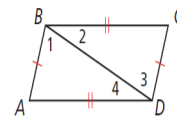
Algebra Find the values of a and b that would make the quadrilateral a parallelogram.



26. Complete the two-column proof of Theorem 6-3-2 by filling in the blanks.

Given: $\overline{AB} \cong \overline{CD}$,
 $\overline{BC} \cong \overline{DA}$

Prove: $ABCD$ is a parallelogram.



Proof:

Statements	Reasons
1. $\overline{AB} \cong \overline{CD}, \overline{BC} \cong \overline{DA}$	1. Given
2. $\overline{BD} \cong \overline{BD}$	2. a. ?
3. $\triangle DAB \cong \triangle BCD$	3. c. ? SSS
4. $\angle 1 \cong \angle 2, \angle 4 \cong \angle 3$	4. CPCTC
5. $\overline{AB} \parallel \overline{CD}, \overline{BC} \parallel \overline{DA}$	5. f. ?
6. $ABCD$ is a parallelogram.	6. g. ? Def. of \square

**a. Reflex. P of \cong
f. Conv. of Int. \angle Thm.**

Geometry LAB Name: _____ Date: _____ Section: _____

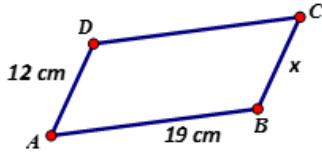
Unit 6 Day 3 Notes: Parallelograms Review

BOTH sets of OPPOSITE sides parallel

1. The definition of a parallelogram is _____

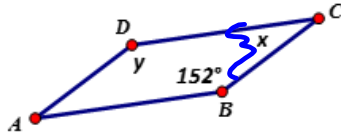
2. Given parallelogram ABCD, determine the missing information.

a)



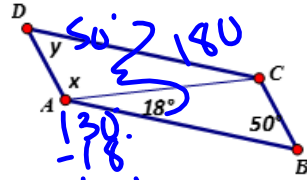
$x = \underline{12 \text{ cm}}$
 Perimeter = 62 cm

b)

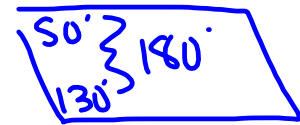


$x = \underline{28}$
 $y = \underline{152}$

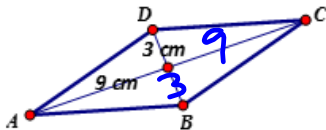
c)



$x = \underline{112}$
 $y = \underline{50}$

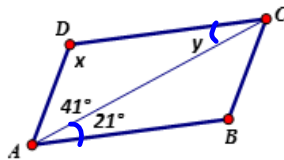


d)



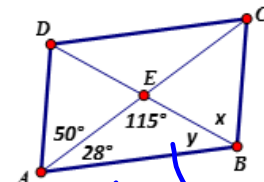
$AC = \underline{18 \text{ cm}}$
 $BD = \underline{6 \text{ cm}}$

e)



$x = \underline{118}$ $180 - 62$
 $y = \underline{21}$

f)

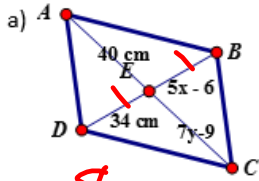


$x = \underline{37}$
 $y = \underline{65}$

Δ SUM

$102 - 65 = 37$

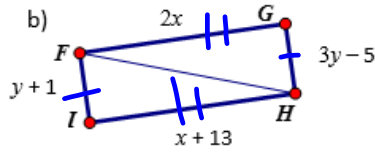
3. Determine the values of x and y which prove the given quadrilateral is a parallelogram. Explain which condition you satisfied:



$x = \frac{8}{7}$
 $y = \frac{7}{7}$

Condition:

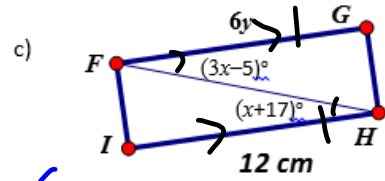
DIAGONALS
 BISECT EACH
 OTHER \rightarrow \square



$x = \frac{13}{3}$
 $y = \frac{3}{3}$

Condition:

BOTH PAIRS
 OPP SIDES \cong
 \rightarrow \square



$x = \frac{11}{2}$
 $y = \frac{2}{2}$

Condition:



- Use Lesson Summary for Quiz
- Complete back of Worksheet for HW

