

Chapter 6: Quadrilaterals
Lesson 6-1: Parallelograms
Classwork

Name _____

Complete each statement.

1. In a parallelogram, opposite angles are _____.
2. In a parallelogram, opposite sides are _____ and _____.
3. In a parallelogram, consecutive angles are _____.
4. How many sides does every parallelogram have? _____
5. Are the diagonals congruent in a parallelogram? _____
6. In parallelogram ABCD, $\overline{AB} \cong$ _____.
7. In parallelogram ABCD, $\angle B$ is consecutive to \angle _____ and \angle _____.
8. In parallelogram ABCD, if $m\angle C = 47^\circ$, then $m\angle A =$ _____, $m\angle B =$ _____, and $m\angle D =$ _____.
9. In parallelogram ABCD if the diagonals intersect at P, then $\overline{AP} \cong$ _____ and $\overline{BP} \cong$ _____.
10. In parallelogram ABCD, $\overline{AD} \parallel$ _____.

ABCD is a parallelogram. State the reason that justifies each statement.

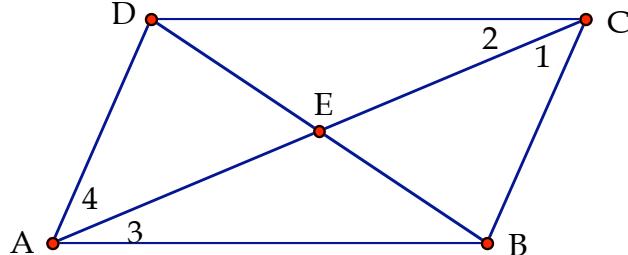
11. $\angle DAB \cong \angle DCB$

12. $\overline{BE} \cong \overline{ED}$

13. $\overline{AD} \cong \overline{BC}$

14. $\angle DAB$ and $\angle ABC$ are supplementary

15. $\overline{AD} \parallel \overline{BC}$



16. $\angle 3 \cong \angle 2$

Complete each statement, using the diagram from #11-16.

17. If $AD = 20$, $BC =$ _____

18. If $m\angle ADC = 115^\circ$, then $m\angle ABC =$ _____

19. If $DB = 22$, then $DE =$ _____

20. If $AE = 18$, then $AC =$ _____

21. If $m\angle DAB = 75^\circ$, $m\angle ADC =$ _____

22. If $m\angle 1 = 30^\circ$, then $m\angle 4 =$ _____

23. If $m\angle AED = 72^\circ$, $m\angle DEC =$ _____

24. If $m\angle ADC = 130^\circ$ and $m\angle 1 = 35^\circ$, $m\angle 2 =$ _____

Lesson : **Parallelogram**
Integrated III

Name _____

Find the missing measurements of Parallelogram ABCD.

$$AB = 4$$

$$BC = 16$$

$$CD = \underline{\hspace{2cm}}$$

$$DA = \underline{\hspace{2cm}}$$

$$AC = 14$$

$$DB = 18$$

$$AE = \underline{\hspace{2cm}}$$

$$BE = \underline{\hspace{2cm}}$$

$$CE = \underline{\hspace{2cm}}$$

$$DE = \underline{\hspace{2cm}}$$

$$m\angle ABE = 38^\circ$$

$$m\angle EBC = 24^\circ$$

$$m\angle BCE = 30^\circ$$

$$m\angle ECD = \underline{\hspace{2cm}}$$

$$m\angle CDE = \underline{\hspace{2cm}}$$

$$m\angle EDA = \underline{\hspace{2cm}}$$

$$m\angle DAE = \underline{\hspace{2cm}}$$

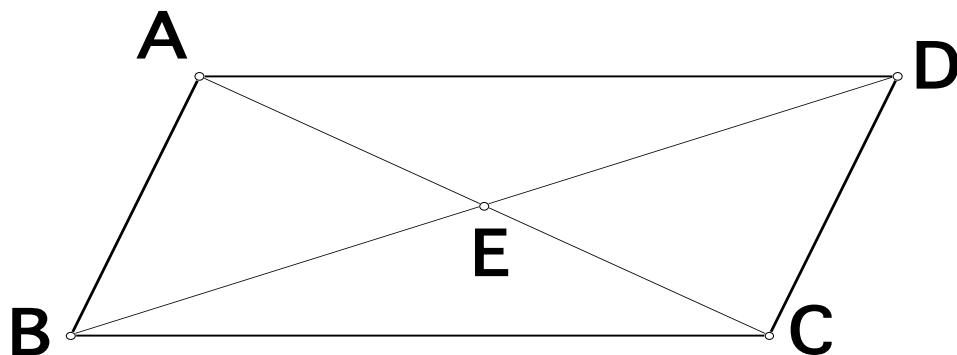
$$m\angle EAB = \underline{\hspace{2cm}}$$

$$m\angle AEB = \underline{\hspace{2cm}}$$

$$m\angle BEC = \underline{\hspace{2cm}}$$

$$m\angle CED = \underline{\hspace{2cm}}$$

$$m\angle DEA = \underline{\hspace{2cm}}$$



Find the missing measurements of Parallelogram ABCD.

$$AB = 10$$

$$BC = 24$$

$$CD = \underline{\hspace{2cm}}$$

$$DA = \underline{\hspace{2cm}}$$

$$AC = \underline{\hspace{2cm}}$$

$$DB = \underline{\hspace{2cm}}$$

$$AE = 12$$

$$BE = 13$$

$$CE = \underline{\hspace{2cm}}$$

$$DE = \underline{\hspace{2cm}}$$

$$m\angle ABE = 47^\circ$$

$$m\angle EBC = 27^\circ$$

$$m\angle BCE = \underline{\hspace{2cm}}$$

$$m\angle ECD = 72^\circ$$

$$m\angle CDE = \underline{\hspace{2cm}}$$

$$m\angle EDA = \underline{\hspace{2cm}}$$

$$m\angle DAE = \underline{\hspace{2cm}}$$

$$m\angle EAB = \underline{\hspace{2cm}}$$

$$m\angle AEB = \underline{\hspace{2cm}}$$

$$m\angle BEC = \underline{\hspace{2cm}}$$

$$m\angle CED = \underline{\hspace{2cm}}$$

$$m\angle DEA = \underline{\hspace{2cm}}$$

