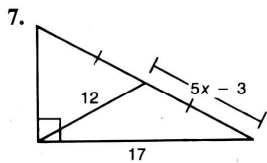


## Practice 19 Special Quadrilaterals

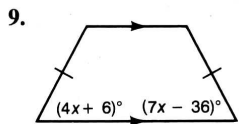
Classify each statement as *always*, *sometimes*, or *never* true.

1. A parallelogram contains exactly two right angles. \_\_\_\_\_
2. Each diagonal of a parallelogram bisects two angles of the parallelogram. \_\_\_\_\_
3. A rhombus with no right angles has congruent diagonals. \_\_\_\_\_
4. The diagonals of a rhombus are perpendicular. \_\_\_\_\_
5. A rectangle that is not a square has perpendicular diagonals. \_\_\_\_\_
6. A quadrilateral with diagonals that are perpendicular is a parallelogram. \_\_\_\_\_

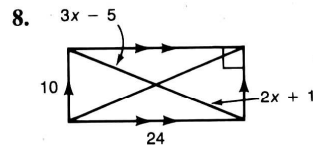
Find the value of  $x$ .



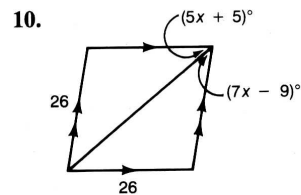
$x =$  \_\_\_\_\_



$x =$  \_\_\_\_\_



$x =$  \_\_\_\_\_



$x =$  \_\_\_\_\_

$\overline{IJ}$  is the median of trapezoid  $EFGH$ . Find the value of  $x$ .

	$EF$	$HG$	$IJ$	$x$
11.	7	13	$x$	
12.	$3\frac{1}{2}$	$x$	$5\frac{1}{4}$	
13.	18.3	$x$	21.2	
14.	9	$x + 8$	$x$	

Give the most descriptive name for quad.  $ABCD$ .

15.  $\angle A \cong \angle C$  and  $\angle B \cong \angle D$  \_\_\_\_\_
16.  $\overline{AB} \cong \overline{BC} \cong \overline{CD} \cong \overline{DA}$  and  $\angle A \cong \angle B$  \_\_\_\_\_
17.  $\overline{AB} \parallel \overline{DC}$ ,  $\overline{AD} \cong \overline{BC}$ , and  $DC > AB$  \_\_\_\_\_

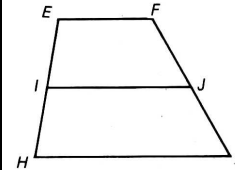
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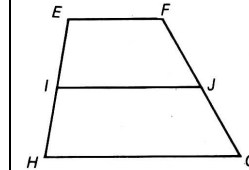
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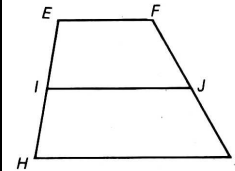
11)



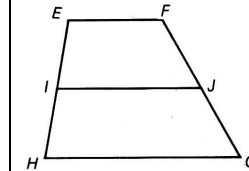
12)



13)



14)



15)

16)

17)

# Practice 20

## Chapter 5 Practice

Classify each statement as true or false.

- The diagonals of a parallelogram must bisect each other. \_\_\_\_\_
- The diagonals of a rhombus must be congruent. \_\_\_\_\_
- Consecutive sides of a parallelogram must be congruent. \_\_\_\_\_
- A square is both a rhombus and a rectangle. \_\_\_\_\_
- The diagonals of a rectangle must be perpendicular. \_\_\_\_\_

$S$ ,  $T$ , and  $V$  are the midpoints of  $\overline{RP}$ ,  $\overline{RQ}$ , and  $\overline{PQ}$ . Complete the following.

- $m\angle RTS = m\angle$  \_\_\_\_\_
- $SV = \frac{1}{2}$  \_\_\_\_\_
- If  $TV = 3\frac{3}{4}$ ,  $RP =$  \_\_\_\_\_.
- If  $PQ = 7.4$ ,  $ST =$  \_\_\_\_\_.
- The best name for  $PSTQ$  is \_\_\_\_\_.

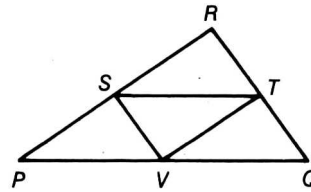
$DEFG$  is a parallelogram. Complete each statement.

- If  $DE = 27$  and  $GF = 5x - 3$ , then  $x =$  \_\_\_\_\_.
- If  $DH = 4x - 3$  and  $HF = 8x - 15$ , then  $x =$  \_\_\_\_\_ and  $DF =$  \_\_\_\_\_.
- If  $m\angle GDE = 92$ , then  $m\angle GFE =$  \_\_\_\_\_ and  $m\angle DEF =$  \_\_\_\_\_.
- If  $\overline{DG} \perp \overline{GF}$ , then  $DEFG$  is a \_\_\_\_\_.

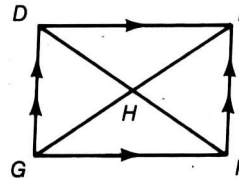
What additional information is needed to prove that quadrilateral  $WXYZ$  is a parallelogram?

- $\angle XWZ \cong \angle XYZ$  \_\_\_\_\_
- $\overline{WZ} \parallel \overline{XY}$  \_\_\_\_\_ or \_\_\_\_\_
- $\overline{WX} \cong \overline{ZY}$  \_\_\_\_\_ or \_\_\_\_\_
- $\overline{WP} \cong \overline{PY}$  \_\_\_\_\_

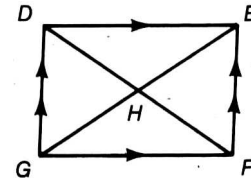
6-10:



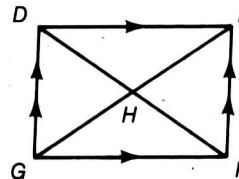
11)



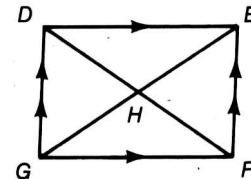
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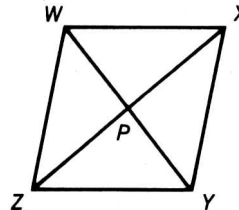
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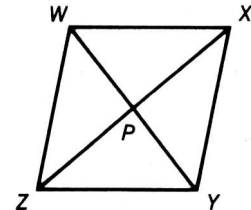
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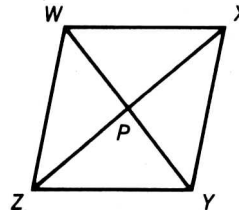
15)



16)



17)



18)

