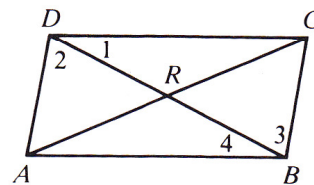


**CHAPTER 5 REVIEW WORKSHEET****Remember to organize and show all of your work.**Complete each statement with the word *always*, *sometimes*, or *never*.

1. A rectangle is ? a square.
2. The diagonals of a square are ? perpendicular.
3. A rhombus is ? equiangular.
4. If  $\overline{AD} \parallel \overline{BC}$  and  $\overline{AB} \cong \overline{CD}$ , then quadrilateral  $ABCD$  is ? a parallelogram.
5. A trapezoid ? has congruent bases.

Quadrilateral  $ABCD$  is a parallelogram. Complete.

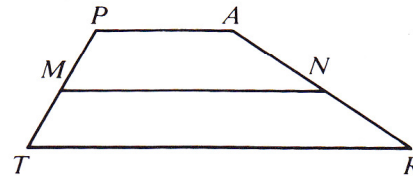
6. If  $DC = 8$  and  $AD = 6$ , then  $AB = \underline{?}$  and  $BC = \underline{?}$ .
7. If  $RC = 10$  and  $DR = 7$ , then  $BD = \underline{?}$  and  $AR = \underline{?}$ .
8. If  $m\angle CDA = 100$ , then  $m\angle ABC = \underline{?}$  and  $m\angle DAB = \underline{?}$ .
9. If  $m\angle 1 = 30$  and  $m\angle 2 = 40$ , then  $m\angle 3 = \underline{?}$  and  $m\angle 4 = \underline{?}$ .



Exs. 6-9

Trapezoid  $TRAP$  has median  $\overline{MN}$ .

10. If  $m\angle T = 60$  and  $m\angle A = 150$ , then  $m\angle P = \underline{?}$  and  $m\angle R = \underline{?}$ .
11. If  $PM = 12$  and  $NR = 15$ , then  $MT = \underline{?}$  and  $AN = \underline{?}$ .
12. If  $PA = 3x - 6$ ,  $MN = x + 5$ , and  $TR = 5x - 2$ , then  $x = \underline{?}$ .



Exs. 10-12

Complete.

13. The segment that joins the midpoints of two sides of a triangle is ? to the third side and ? as long as the third side.
14. If two lines are parallel, then all points on one line are ? from the other line.

# Practice 21

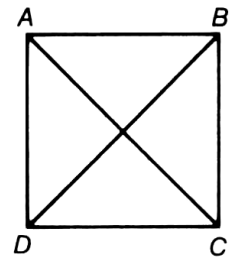
## Cumulative Practice, Chapters 4–5

Complete.

- If  $\triangle TOP \cong \triangle HAT$ , then  $\angle P \cong$  \_\_\_\_\_,  $\overline{TP} \cong$  \_\_\_\_\_, and  $\triangle TPO \cong$  \_\_\_\_\_.
- In  $\triangle TRI$ ,  $\overline{TR} \cong \overline{TI}$ . Then  $\angle$ \_\_\_\_\_  $\cong \angle$ \_\_\_\_\_.
- In trapezoid  $TRAP$ ,  $\overline{TR} \parallel \overline{PA}$ . If  $TR = 26$  and the median of  $TRAP$  has length 32, then  $PA =$  \_\_\_\_\_.
- Name five theorems or postulates that can be used to prove two triangles congruent. \_\_\_\_\_
- In  $\triangle RST$ , if  $X$  is the midpoint of  $\overline{ST}$  and  $\overline{YX} \perp \overline{ST}$ , then  $\overline{YX}$  is a(n) \_\_\_\_\_ of  $\overline{ST}$ .

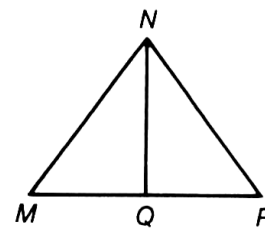
Give the name that best describes quadrilateral  $ABCD$ .

- $\overline{AB} \cong \overline{DC}$ ,  $\overline{AB} \parallel \overline{DC}$ ,  $\overline{AD} \cong \overline{BC}$ , and  $\overline{AD} \perp \overline{DC}$ . \_\_\_\_\_
- $\overline{AC}$  and  $\overline{BD}$  are perpendicular bisectors of each other. \_\_\_\_\_
- $\overline{AB} \parallel \overline{DC}$ ,  $\overline{AD} \parallel \overline{BC}$ , and  $\overline{AD} \perp \overline{DC}$ . \_\_\_\_\_
- $\overline{AB} \parallel \overline{DC}$ ,  $\overline{AD} \parallel \overline{BC}$ , and  $\overline{AD} \cong \overline{BC}$ . \_\_\_\_\_



Name the theorem or postulate that can be used to prove that  $\triangle NQM \cong \triangle NQP$  under the given conditions.

- $\overline{NQ} \perp \overline{MP}$  and  $Q$  is the midpoint of  $\overline{MP}$ . \_\_\_\_\_
- $\overline{NQ} \perp \overline{MP}$  and  $\overline{NM} \cong \overline{NP}$ . \_\_\_\_\_
- $\overline{NQ} \perp \overline{MP}$  and  $\overline{NQ}$  bisects  $\angle MNP$ . \_\_\_\_\_



Exs. 10–12