

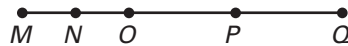
# Standardized Test Practice

For use with pages 17–25

**TEST TAKING STRATEGY** Sketch graphs or figures in your test booklet to help you solve the problems. Even though you must keep your answer sheet neat, you can make any kind of mark you want in your test booklet.

- Multiple Choice** A rule that is accepted without proof is called a \_\_\_\_\_.  
 (A) theorem       (B) postulate  
 (C) axiom       (D) A and B  
 (E) B and C
- Multiple Choice** Find the length of  $\overline{AC}$  if  $AB$  is 6,  $BC$  is 10, and  $B$  is between  $A$  and  $C$ .  
 (A) 4       (B) 16       (C) -4  
 (D) 60       (E) 6

**Multiple Choice** In Exercises 3–7, use the diagram below where  $MQ = 30$ ,  $MN = 5$ ,  $MN = NO$  and  $OP = PQ$ .



- Find the length of  $\overline{OQ}$ .  
 (A) 5       (B) 10       (C) 15  
 (D) 20       (E) 25
- Find the length of  $\overline{PQ}$ .  
 (A) 5       (B) 10       (C) 15  
 (D) 20       (E) 25
- Find the length of  $\overline{NO}$ .  
 (A) 5       (B) 10       (C) 15  
 (D) 20       (E) 25
- Find the length of  $\overline{NP}$ .  
 (A) 5       (B) 10       (C) 15  
 (D) 20       (E) 25
- Which of the statements below are not true?  
 (A)  $NP = MN + PQ$     (B)  $MP = OQ$   
 (C)  $NQ = MP$        (D)  $MO = PQ$   
 (E)  $MQ = PQ \cdot 3$

- Multiple Choice** Point  $H$  is between  $G$  and  $I$ . Use the segment addition postulate to solve for  $x$  when  $GH = 8x + 7$ ,  $HI = 3x - 2$ , and  $GI = 38$ .  
 (A) 3       (B) 5       (C) 7  
 (D) 31       (E) 39
- Multiple Choice** In Exercise 8, the length of  $\overline{HI}$  is \_\_\_\_\_.  
 (A) 3       (B) 5       (C) 7  
 (D) 31       (E) 39

- Multiple Choice** Use points  $A(5, 1)$ ,  $B(5, 6)$ ,  $C(1, 4)$  and  $D(4, -2)$  to determine which of the following is true.  
 (A)  $\overline{AB} \cong \overline{BC}$        (B)  $\overline{AB} \cong \overline{CD}$   
 (C)  $\overline{AB} \cong \overline{BD}$        (D)  $\overline{AC} \cong \overline{AB}$   
 (E)  $\overline{BC} \cong \overline{CD}$

**Quantitative Comparison** In Exercises 11–13, choose the statement below that is true about the given values.

- The value in column A is greater.
- The value in column B is greater.
- The two values are equal.
- The relationship cannot be determined from the information given.

	Column A	Column B
11.	$AB$ when $A(1, 3)$ and $B(3, -6)$	$XY$ when $X(5, 2)$ and $Y(-1, 4)$
12.	$AB$ when $A(-2, -4)$ and $B(3, 2)$	$XY$ when $X(-5, 3)$ and $Y(-8, -2)$
13.	$XZ$	$XY + YZ$