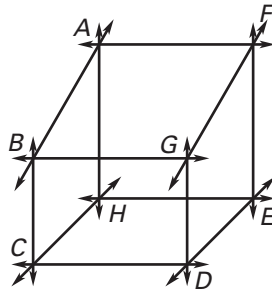


# Chapter Test B

For use after Chapter 3

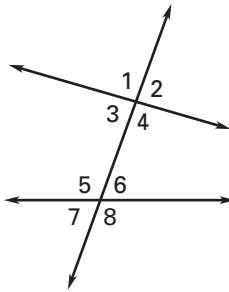
In Exercises 1–4, use the diagram to complete each statement.

1. A line parallel to  $\overleftrightarrow{FE}$  is \_\_\_\_\_?
2. A line perpendicular to  $\overleftrightarrow{CD}$  is \_\_\_\_\_?
3. A line skew to  $\overleftrightarrow{BC}$  is \_\_\_\_\_?
4. Plane  $BCG$  is parallel to plane \_\_\_\_\_?



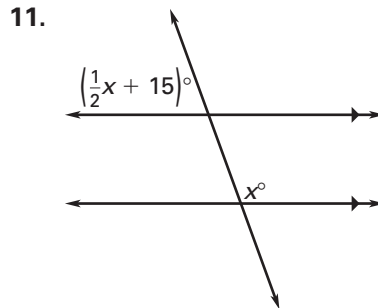
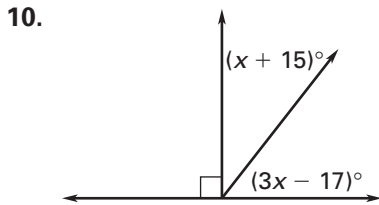
In Exercises 5–9, use the diagram to complete the statement with *corresponding*, *alternate interior*, *alternate exterior*, or *consecutive interior*.

5.  $\angle 3$  and  $\angle 6$  are \_\_\_\_\_? angles.
6.  $\angle 4$  and  $\angle 6$  are \_\_\_\_\_? angles.
7.  $\angle 2$  and  $\angle 7$  are \_\_\_\_\_? angles.
8.  $\angle 1$  and  $\angle 5$  are \_\_\_\_\_? angles.
9.  $\angle 1$  and  $\angle 8$  are \_\_\_\_\_? angles.

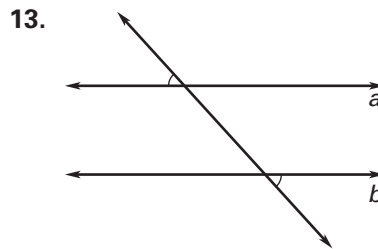
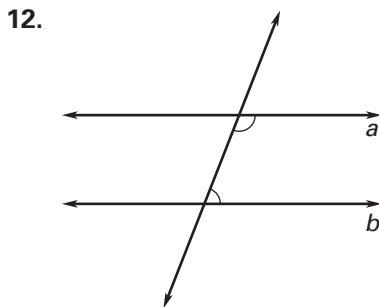


1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_
13. \_\_\_\_\_

Find the value of  $x$ .



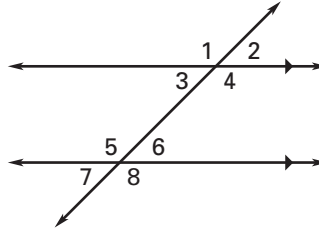
In Exercises 12 and 13, state the postulate or theorem you would use to prove that lines  $a$  and  $b$  are parallel.



# Chapter Test B

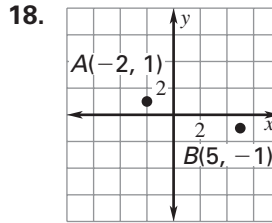
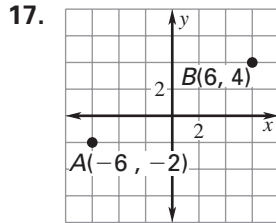
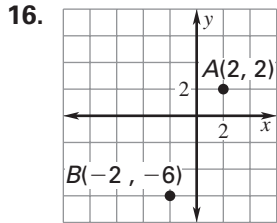
For use after Chapter 3

In Exercises 14 and 15, use the diagram to state whether the given angles are *supplementary* or *congruent*.



14.  $\angle 4$  and  $\angle 6$  are \_\_\_\_\_ ? \_\_\_\_\_ .  
 15.  $\angle 1$  and  $\angle 8$  are \_\_\_\_\_ ? \_\_\_\_\_ .

Find the slope of the line that passes through the labeled points on the graph.



14. \_\_\_\_\_  
 15. \_\_\_\_\_  
 16. \_\_\_\_\_  
 17. \_\_\_\_\_  
 18. \_\_\_\_\_  
 19. \_\_\_\_\_  
 20. \_\_\_\_\_  
 21. \_\_\_\_\_  
 22. \_\_\_\_\_  
 23. \_\_\_\_\_

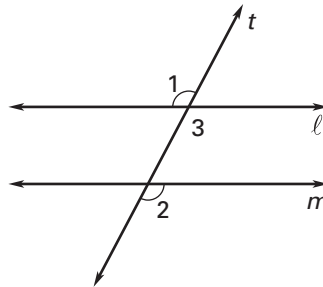
Decide whether the lines with the given equations are *perpendicular*, *parallel*, or *neither*.

19.  $y = 4x - 3$                       20.  $y = 2x - 3$   
 $y = 2x - 3$                                $y = -\frac{1}{2}x + 2$   
 21.  $y = 5x + 7$                         22.  $y = 2x + 4$   
 $y = 5x - 7$                                $y = -\frac{1}{2}x + 4$

23. Complete the missing statements or reasons for the proof.

Given: Transversal  $t$  cuts lines  
 $\ell$  and  $m$ ;  $\angle 2 \cong \angle 1$

Prove:  $\ell \parallel m$



Statements	Reasons
1. $\angle 2 \cong \angle 1$	1. _____
2.	2. vert. angles are $\cong$
3. $\angle 2 \cong \angle 3$	3. _____
4.	4. _____