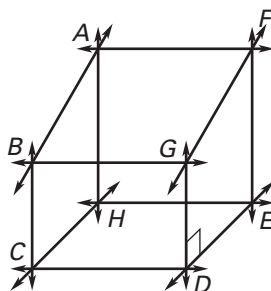


Chapter Test B

For use after Chapter 3

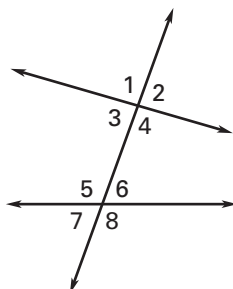
In Exercises 1–4, use the diagram to complete each statement.

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*.

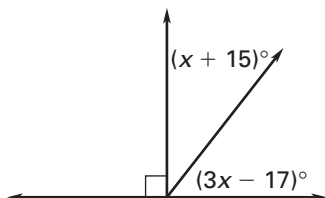
5. $\angle 3$ and $\angle 5$ are _____ angles.
6. $\angle 2$ and $\angle 7$ are _____ angles.
7. $\angle 2$ and $\angle 6$ are _____ angles.
8. $\angle 4$ and $\angle 5$ are _____ angles.
9. $\angle 3$ and $\angle 7$ are _____ angles.



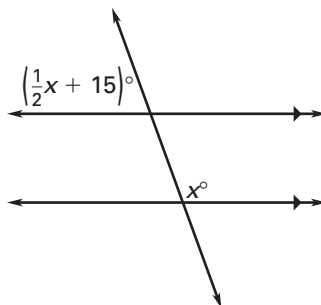
1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____

Find the value of x .

10.

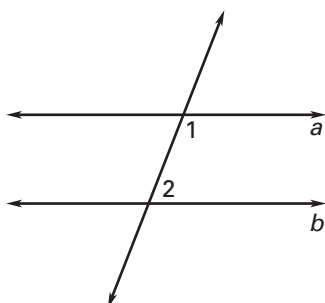


11.



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

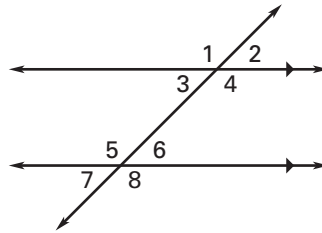
12. $\angle 1$ and $\angle 2$ are supplementary. 13. $a \parallel c$ and $b \parallel c$.



Chapter Test B

For use after Chapter 3

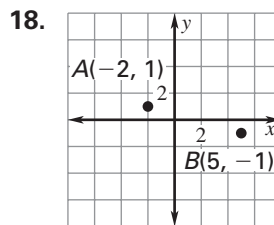
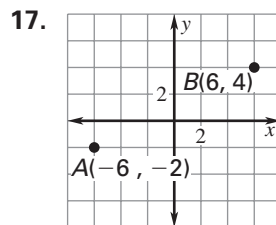
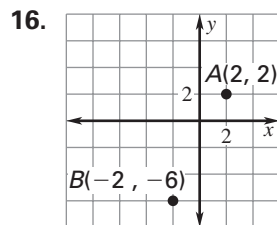
In Exercises 14 and 15, use the diagram to state whether the given angles are *supplementary* or *congruent*.



14. $\angle 2$ and $\angle 6$ are ____?

15. $\angle 3$ and $\angle 5$ 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. (See below.)

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

19. $y = 4x - 3$

$y = 2x - 3$

21. $y = 5x + 7$

$y = 5x - 7$

20. $y = 2x - 3$

$y = -\frac{1}{2}x + 2$

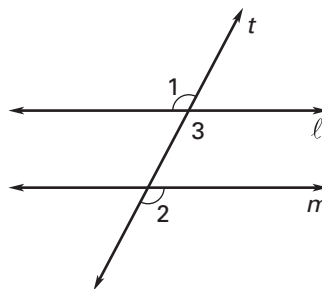
22. $y = -2x + 4$

$y = -\frac{1}{2}x + 4$

23. Complete the missing statements or reasons for the proof of the Alternate Exterior Angles Converse.

Given: Transversal t cuts lines ℓ 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. _____