Name _____ Date _____

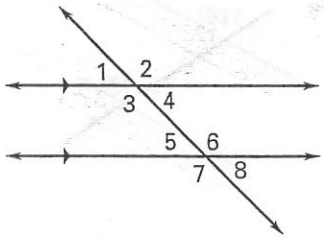
LESSON 3.2

Practice A

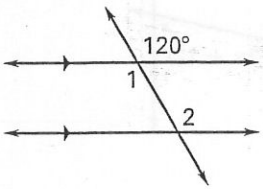
For use with the lesson "Use Parallel Lines and Transversals"

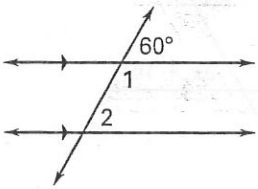
What postulate or theorem justifies the statement about the diagram?

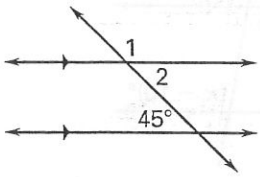
1. $\angle 1 \cong \angle 5$
2. $\angle 4$ and $\angle 6$ are supplementary.
3. $\angle 4 \cong \angle 5$
4. $\angle 2 \cong \angle 7$

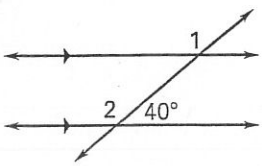


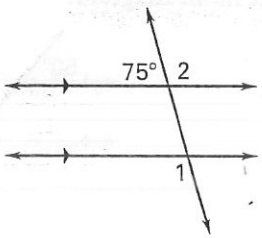
Find $m\angle 1$ and $m\angle 2$.

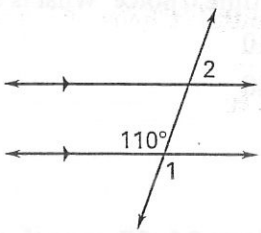
5. 

6. 

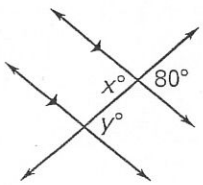
7. 

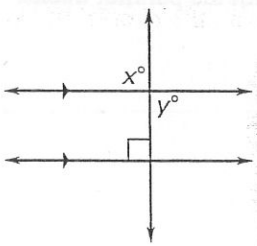
8. 

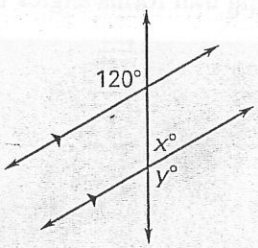
9. 

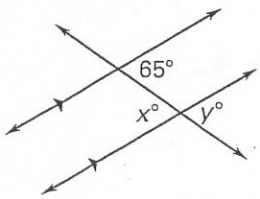
10. 

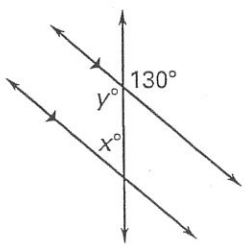
Find the values of x and y.

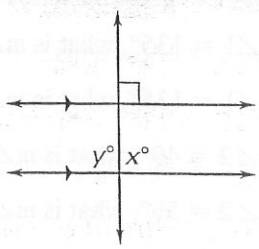
11. 

12. 

13. 

14. 

15. 

16. 

Name _____ Date _____

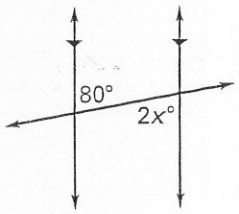
LESSON 3.2

Practice A *continued*

For use with the lesson "Use Parallel Lines and Transversals"

Find the value of x.

17.



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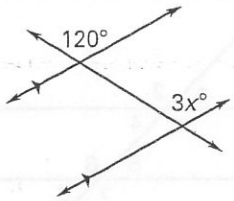

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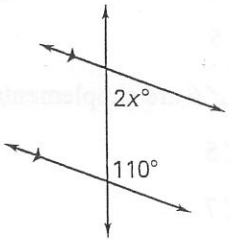

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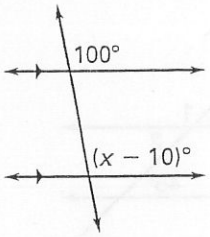

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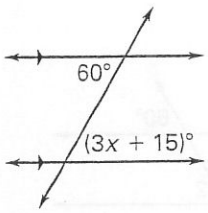

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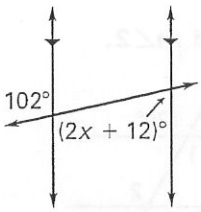
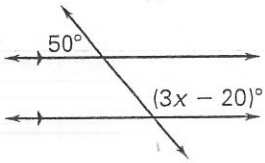


23. Multiple Choice What is the value of x in the diagram?

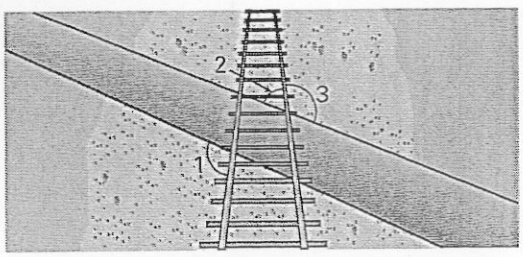
A. 40 **B.** 50

C. 60 **D.** 70



In Exercises 24–27, use the diagram.

A hiking trail crosses a set of train tracks as shown in the diagram. The parallel edges of the hiking trail forms angles 1, 2, and 3 with the parallel tracks.



24. If $m\angle 1 = 135°$, what is $m\angle 3$?

25. If $m\angle 1 = 135°$, what is $m\angle 2$?

26. If $m\angle 2 = 40°$, what is $m\angle 3$?

27. If $m\angle 2 = 50°$, what is $m\angle 1$?