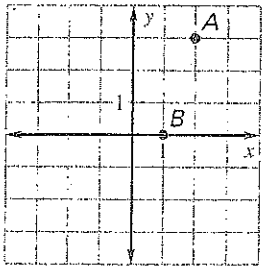
Name _____ Date _____

LESSON 3.4

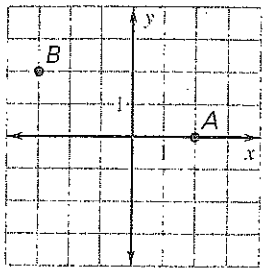
Practice

For use with the lesson "Find and Use Slopes of Lines"

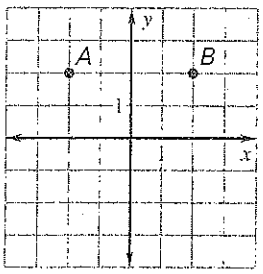
Find the slope of the line that passes through the points.

1. 

m =

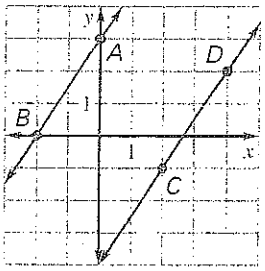
2. 

m =

3. 

m =

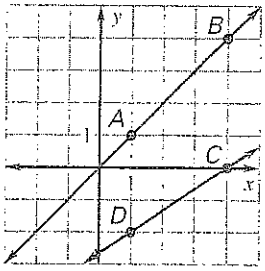
Find the slope of each line. Are the lines parallel?

4. 

m of $\overleftrightarrow{AB}$ =

m of $\overleftrightarrow{CD}$ =

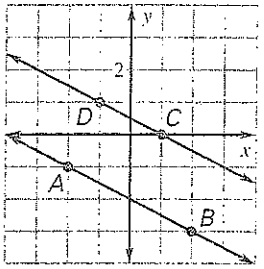
Conclusion =

5. 

m of $\overleftrightarrow{AB}$ =

m of $\overleftrightarrow{CD}$ =

Conclusion =

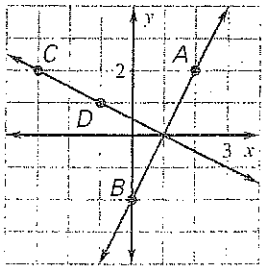
6. 

m of $\overleftrightarrow{AB}$ =

m of $\overleftrightarrow{CD}$ =

Conclusion =

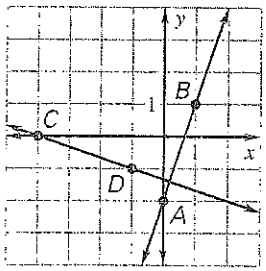
Find the slope of each line. Are the lines perpendicular?

7. 

m of $\overleftrightarrow{AB}$ =

m of $\overleftrightarrow{CD}$ =

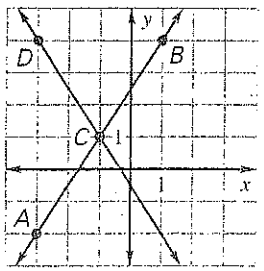
Conclusion =

8. 

m of $\overleftrightarrow{AB}$ =

m of $\overleftrightarrow{CD}$ =

conclusion =

9. 

m of $\overleftrightarrow{AB}$ =

m of $\overleftrightarrow{CD}$ =

conclusion =

Name _____ Date _____

LESSON 3.4 **Practice** *continued*
For use with the lesson "Find and Use Slopes of Lines"

Tell whether the lines through the given points are *parallel, perpendicular,* or *neither.*

10. Line 1: $(-1, 2), (2, 3)$
Line 2: $(0, 0), (3, 1)$

11. Line 1: $(0, 1), (1, 3)$
Line 2: $(4, -1), (5, 2)$

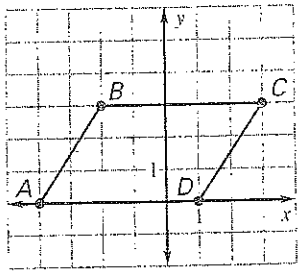
12. Line 1: $(-5, 0), (-3, -2)$
Line 2: $(-2, 2), (0, 4)$

Tell whether the intersection of $\overleftrightarrow{AB}$ and $\overleftrightarrow{CD}$ forms a right angle. (are they perpendicular)

13. $A(-8, 3), B(1, 2), C(0, 9), D(-1, 0)$

14 $A(3, 2), B(5, 10), C(7, -4), D(3, -3)$

15 **Parallelograms** A parallelogram is a four-sided figure whose opposite sides are parallel. *Explain* why the figure shown is a parallelogram.



16 **Escalators** On an escalator, you move 2 feet vertically for every 3 feet you move horizontally. When you reach the top of the escalator, you have moved a horizontal distance of 90 feet. Find the height h of the escalator.