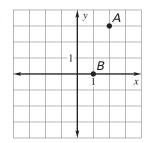
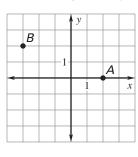
Find the slope of the line that passes through the points.

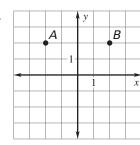
1.

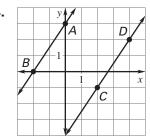


2.

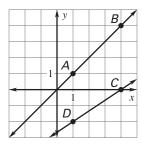


3.

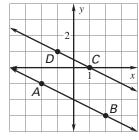




5.

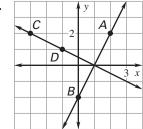


6.

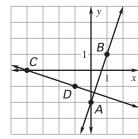


Find the slope of each line. Are the lines perpendicular?

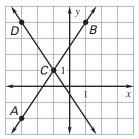
7.



8.



9.



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

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

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

13. Line 1:
$$(-3, 4), (-3, 1)$$
 14. Line 1: $(-5, 2), (-2, 2)$ **15.** Line 1: $(-2, 5), (1, 4)$

10. Line 1:
$$(-1, 2)$$
, $(2, 3)$ **11.** Line 1: $(0, 1)$, $(1, 3)$ **12.** Line 1: $(-5, 0)$, $(-3, -2)$

Line 2:
$$(-2, 2)$$
, $(0, 4)$

15. Line 1:
$$(-2, 5)$$
, $(1, 4)$

Tell whether the intersection of \overrightarrow{AB} and \overrightarrow{CD} forms a right angle.

16.
$$A(-8,3)$$
, $B(1,2)$, $C(0,9)$, $D(-1,0)$

17.
$$A(3, 2), B(5, 10), C(7, -4), D(3, -3)$$

18.
$$A(5,4)$$
 $B(-3,20)$ $C(9,-2)$ $D(6,4)$

19.
$$A(7, 12), B(1, 5), C(10, -7), D(3, -1)$$

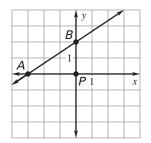
20.
$$A(-8, 17), B(-5, 18), C(6, 11), D(5, 8)$$

16.
$$A(-8,3), B(1,2), C(0,9), D(-1,0)$$
17. $A(3,2), B(5,10), C(7,-4), D(3,-3)$ **18.** $A(5,4), B(-3,20), C(9,-2), D(6,4)$ **19.** $A(7,12), B(1,5), C(10,-7), D(3,-1)$ **20.** $A(-8,17), B(-5,18), C(6,11), D(5,8)$ **21.** $A(-7,3), B(-10,15), C(-1,5), D(4,35)$

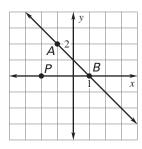
LESSON 3.4 **Practice B** continued For use with pages 171–179

Graph the line parallel to line AB that passes through point P.

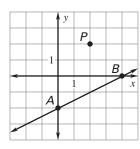
22.



23.

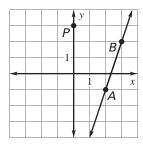


24.

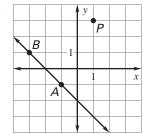


Graph the line perpendicular to line AB that passes through point P.

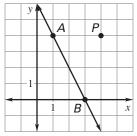
25.



26.



27.



In Exercises 28 and 29, consider the three given lines.

Line a: through the point (2, 0) with a y-intercept of (0, 1)

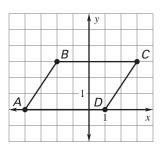
Line b: through the point (2, 0) with a y-intercept of (0, 5)

Line c: through the point (2, 0) with a y-intercept of (0, 3)

28. Which line is most steep?

29. Which line is least steep?

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



31. 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.

