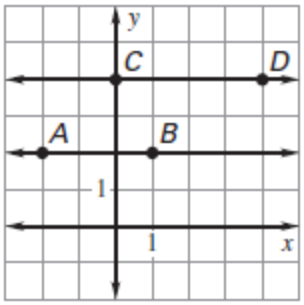
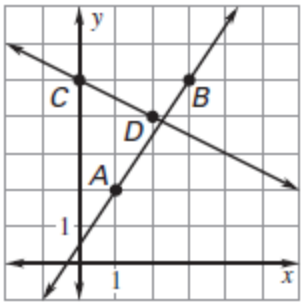
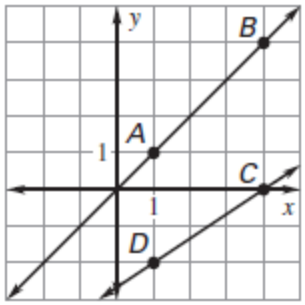
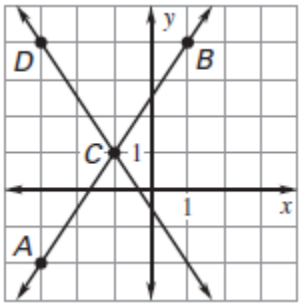
Name _____ **Hour** _____

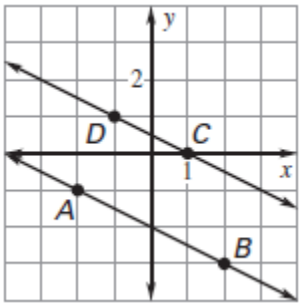
Find the slopes of $\overleftrightarrow{AB}$ and $\overleftrightarrow{CD}$. Tell whether the lines are *parallel*, *perpendicular*, or *neither*.

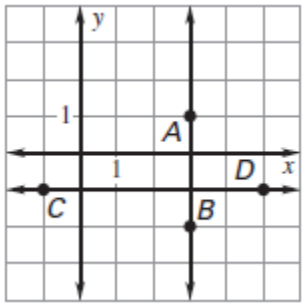
1. 

2. 

3. 

4. 

5. 

6. 

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

7. $y = 3x - 2$
   $y = \frac{1}{3}x + 2$

8. $y = \frac{1}{2}x + 1$
   $y = -2x + 3$

9. $y = -\frac{2}{3}x + 4$
   $y = -\frac{2}{3}x + 8$

10. $y = 3x - 8$
    $3x - y = -1$

11. $y = \frac{2}{3}x + 6$
    $3x + 2y = -10$

12. $y = -\frac{5}{2}x + 11$
    $-5x + 2y = 20$

13. $x = 10$
    $y = -2$

14. $6x + 3y = 30$
    $4x + 2y = 9$

15. $9x + 3y = 6$
    $3x + 9y = 6$

Parallel & Perpendicular Lines #1

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

16. Line 1: $(-5,6)$, $(-2,2)$
    Line 2: $(4,2)$, $(7,6)$

17. Line 1: $(-4,8)$, $(6,2)$
    Line 2: $(-4,1)$, $(-1,6)$

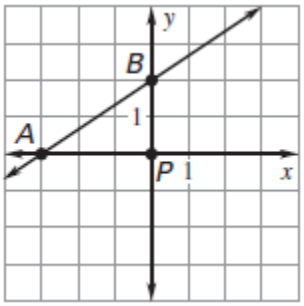
18. Line 1: $(-3,2)$, $(2,12)$
    Line 2: $(0,-8)$, $(-4,-16)$

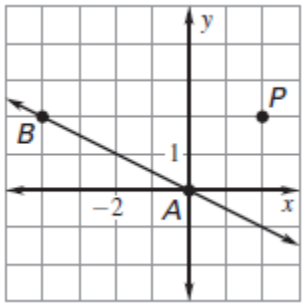
19. Line 1: $(-5,0)$, $(-3,-2)$
    Line 2: $(-6,1)$, $(-3,4)$

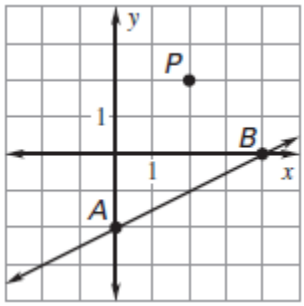
20. Line 1: $(-3,4)$, $(2,1)$
    Line 2: $(2,-5)$, $(5,0)$

21. Line 1: $(-8,2)$, $(-2,2)$
    Line 2: $(-1,1)$, $(7,1)$

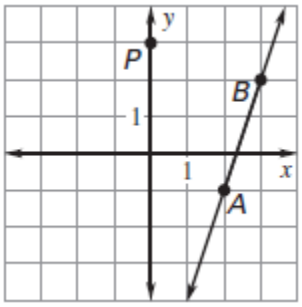
Graph the line parallel to $\overleftrightarrow{AB}$ that passes through point *P*.

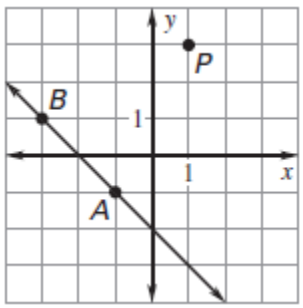
22. 

23. 

24. 

Graph the line perpendicular to $\overleftrightarrow{AB}$ that passes through point *P*.

25. 

26. 

27.