

Name _____
Bell _____ Date _____

Write the slope of a line which is parallel to:

given line

equation in slope-intercept form
(if possible)

slope of the line parallel to the given line

1. $y = 2x - 1$
2. $3y = -6x + 5$
3. $3x - 2y = -7$
4. $4y = -x - 8$
5. $y = 7x + 5$
6. $4x + y = 11$
7. $x = -2$
8. $y = 2$

Write the slope of a line which is perpendicular to:

given line

equation in slope-intercept form
(if possible)

slope of the line perpendicular to the given line

1. $y = -3x + 7$
2. $2y = -3x - 4$
3. $5y - 3x = 6$
4. $-4y = x + 2$
5. $y = -4$
6. $2x = 3$
7. $7x = 5y + 4$
8. $3x - 2y = 4$

Determine whether the pairs of lines will be parallel, perpendicular or neither. Show all work, equations must be written in slope-intercept form. Do not graph. Write a sentence to justify your answer.

17. $\begin{cases} y = 2x + 8 \\ y = 3x + 8 \end{cases}$

18. $\begin{cases} 2x + y = -1 \\ y = -2x + 5 \end{cases}$

19. $\begin{cases} 3y = 9x + 7 \\ x + 3y = 7 \end{cases}$

|| or \perp ? _____
justify: _____

|| or \perp ? _____
justify: _____

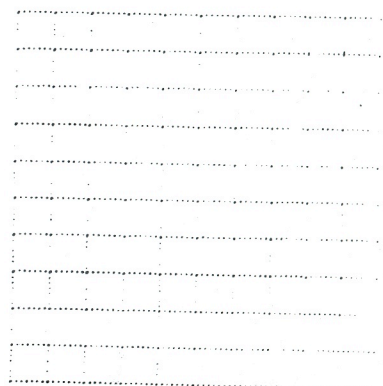
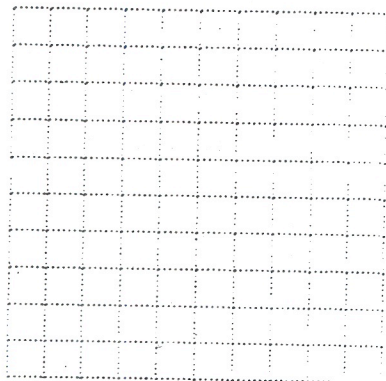
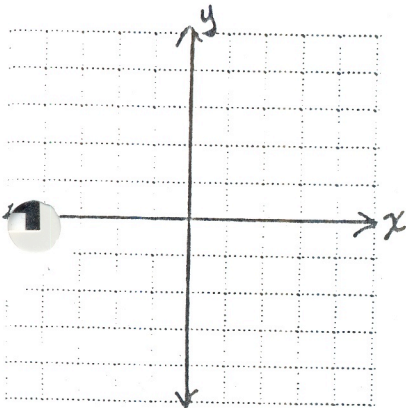
|| or \perp ? _____
justify: _____

Graph each pair of lines on the same coordinate plane, then determine whether the pairs of lines are parallel, perpendicular or neither.

20. $\begin{cases} x = -3 \\ y = 2 \end{cases}$

21. $\begin{cases} y = x - 3 \\ y = -x + 4 \end{cases}$

22. $\begin{cases} y = -x + 3 \\ y = \frac{1}{4}x - 3 \end{cases}$



|| or \perp ? _____

|| or \perp ? _____

|| or \perp ? _____