BOARD PROBLEMS Ch. 10

CHANGE INTO STANDARD FORM: $Ax + By = C$

① $y = -3x + 10$

② $y = \frac{1}{2}x - 5$

CHANGE INTO SLOPE-INTERCEPT FORM.

③ $3x + 4y = 10$

④ $2x - 3y = -8$

SOLVE,

⑤ $8(A+3-9) - 4(2A+5) = 2A+4$

NOTES Ch. 10 - GRAPHING PERPENDICULAR LINES

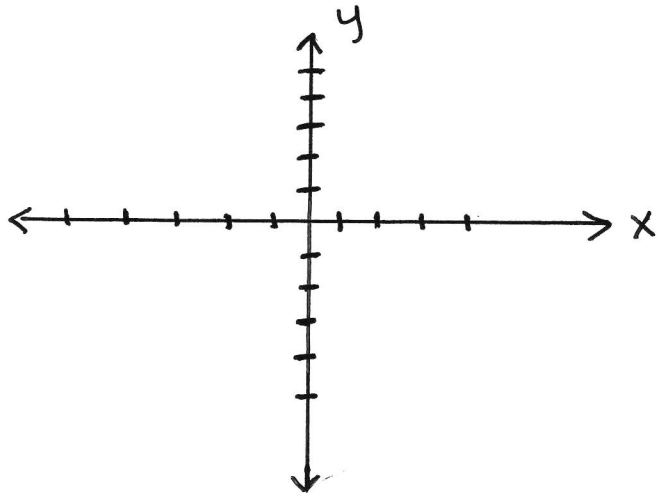
Parallel lines have the _____ _____.

PERPENDICULAR LINES HAVE _____ _____ SLOPES.

m	$m_{\perp}$
$\frac{1}{2}$	_____
3	_____
$-\frac{1}{3}$	_____
$-\frac{5}{4}$	_____
-6	_____
1	_____

PLOT A LINE PERPENDICULAR TO $y = \frac{2}{3}x + 1$ THROUGH POINT $(0, 2)$.

$m =$ $m_{\perp} =$



NEW LINE IN SLOPE-INT FORM _____

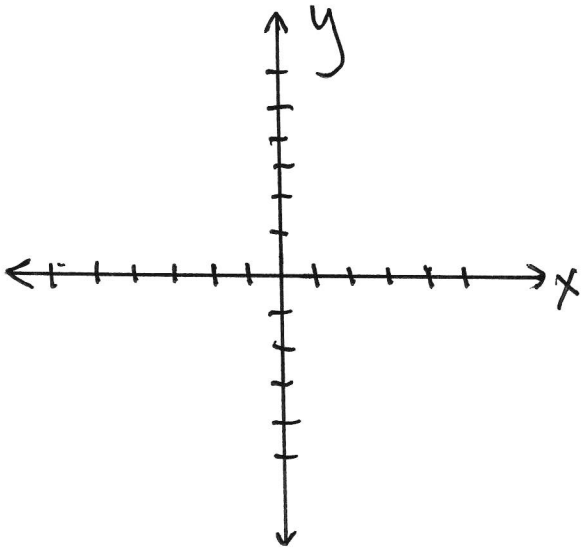
NEW LINE IN STANDARD FORM.

PLOT ORIGINAL LINE : $y = \frac{2}{3}x + 1$

HOW MANY POSSIBLE LINES ARE PERPENDICULAR?

Change ORIGINAL TO STANDARD FORM.

NOTES CH. 10



PLOT : $y = \frac{4}{3}x - 2$

$m_{\perp}$ = ____

PLOT THE Perpendicular sloped Line throug (0,-2)

EQ of $\perp$ LINE

_____

WRITE BOTH LINES IN STANDARD FORM

(1) _____

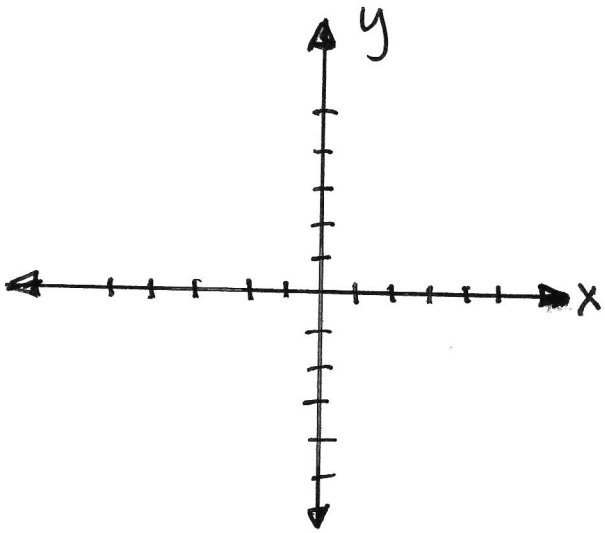
(2) _____

Systematic Review

IF 2 BITS IS WORTH 0.25, HOW MANY BITS ARE IN $2.50?

HOW MUCH IS 100 BITS WORTH IN DOLLARS?

NOTES Ch. 10



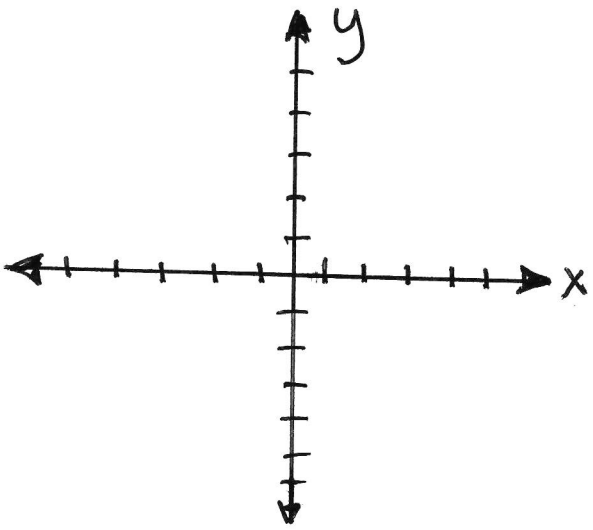
PLOT: $3x - 3y = 6$

$m =$ ____ $m_{\perp} =$ ____

PLOT $\perp$ LINE THROUGH
(2, 1)

SLOPE-INT _____

STANDARD _____



PLOT: $y = \frac{1}{4}x - 4$

$m =$ ____ $m_{\perp} =$ ____

PLOT $\perp$ LINE THROUGH
(0, 2)

write eq. of LINE

_____

write in standard form

_____

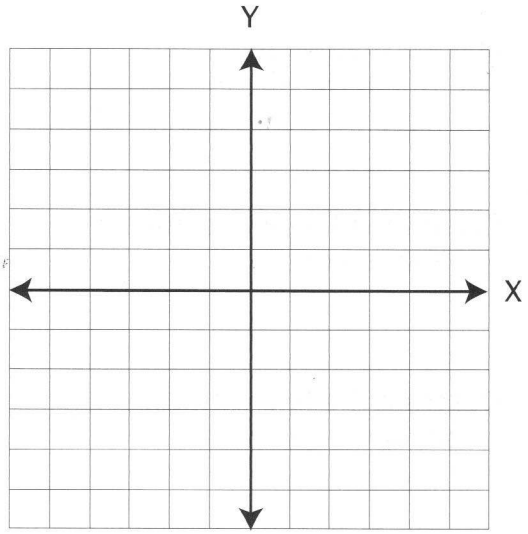
write original in standard

_____

LESSON PRACTICE

Follow the directions for each graph.

1. Plot the points (1, 4) and (-1, -4).



2. Make a right triangle and determine the slope.

3. Extend the line and estimate the Y-intercept.

4. Describe the line with the slope-intercept form.

5. Which of the following lines is perpendicular to the line you drew?

   A. $Y = 4X + 2$

   B. $Y = -1/4\ X$

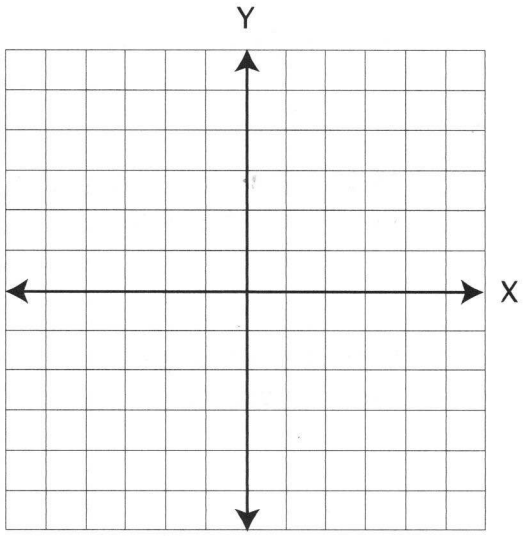
   C. $Y = -4X - 2$

6. Draw a line that is perpendicular to the original line while passing through the point (0, 2).

7. Describe the new line with the slope-intercept form.

8. Describe the new line using the standard form of the equation of a line.

9. Plot the points (-3, 1) and (-1, -1).



10. Make a right triangle and determine the slope.

11. Extend the line and estimate the Y-intercept.

12. Describe the line with the slope-intercept form.

13. Which of the following lines is perpendicular to the line you drew?

    A. $2Y = 2X - 4$

    B. $Y = 4X + 2$

    C. $Y = -1/2\ X + 2$

14. Draw a line that is perpendicular to the original line, while passing through the point (2, 4).

15. Describe the new line with the slope-intercept form.

16. Describe the new line using the standard form of the equation of a line.