CH. 9 - BOARD PROBLEMS

① What is the formula for the equation of a line?

_____

② Define slope and intercept.

$m =$ _____

$b =$ _____

(3) What is the x-coordinate at the y-intercept point?

$x =$ ____

④ What is the equation of a horizontal line crossing the y-axis at -2?

_____

What is the slope? _____

⑤ What is the equation of a vertical line that crosses the x-axis at +3?

_____

What is the slope? ____

⑥ Which of the following is true for (-2, -6)

A. $Y = X + 4$

B. $Y = 3X - 2$

C. $X = Y - 4$

D. $Y = X - 4$

E. $X = 3Y - 2$

NOTE CH. 9

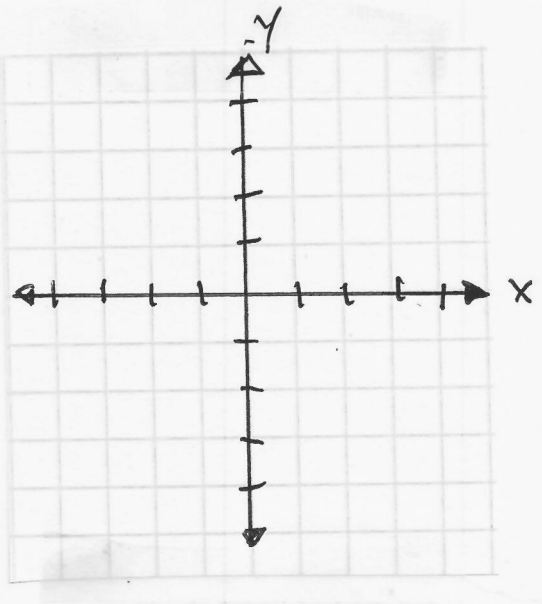
PARALLEL LINES HAVE THE _____ _____.

PLOT

(a) $y = \frac{2}{3}x + 2$

(b) $y = \frac{2}{3}x$

(c) $y = \frac{2}{3}x - 3$



STANDARD EQUATION OF A LINE

$Ax + By = C$, WHERE A, B, C ARE NUMBERS

$2x + 3y = 6$ → HOW WOULD WE GRAPH?

_____

OTHER DIRECTION: SLOPE INT → STANDARD

$y = \frac{4}{5}x + 2$

NOTE: _____

NOTES Ch. 9

Convert to Graph FORM

a) $3x + 2y = 8$

c) $x + 2y = -4$

d) $2x - y = 5$

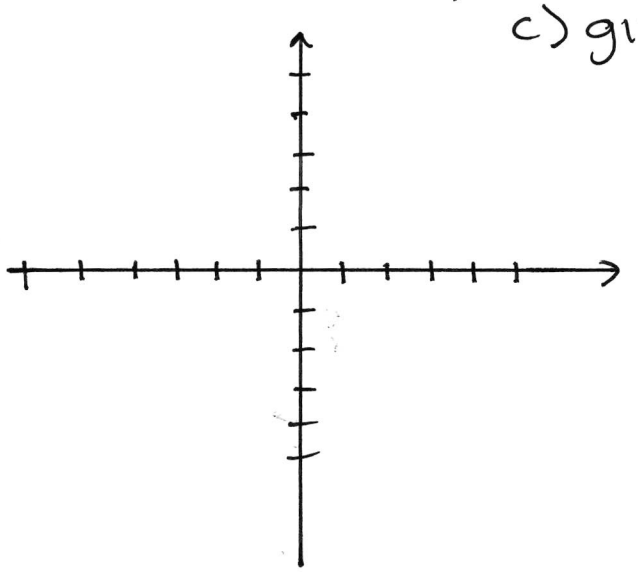
Convert to STANDARD FORM

b) $y = -2x - 1$

d) $y = \frac{3}{2}x + 2$

e) $y = 5x + 1$

GIVEN TWO POINTS, a) graph b) give slope-int formula c) give standard form



1) (-1, 4) (1, 0)

2) (-6, 4) (3, -2)

NOTES: SYSTEMATIC REVIEW

A package costs 25^{00}. TAX IS 6% AND SHIPPING IS 8%.
WHAT IS THE TOTAL COST TO CUSTOMER?

DINNER COSTS 85^{00}. TAX IS 9% AND TIP IS 20%. WHAT IS YOUR TOTAL COST?

HOW MANY HOURS WOULD YOU HAVE TO WORK TO PAY FOR THAT DINNER?

LESSON PRACTICE

Fill in the blanks.

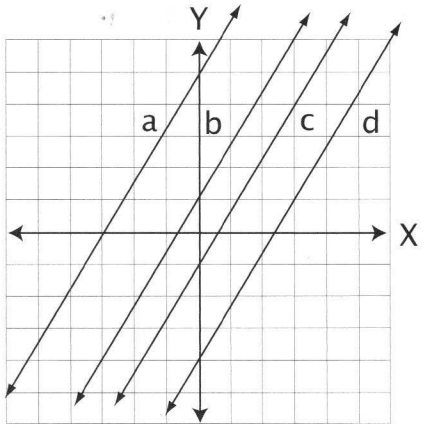
1. Write the slope-intercept formula for lines *a*, *b*, *c*, and *d*.

line *a*. m = ___, b = ___, Y = _____

line *b*. m = ___, b = ___, Y = _____

line *c*. m = ___, b = ___, Y = _____

line *d*. m = ___, b = ___, Y = _____



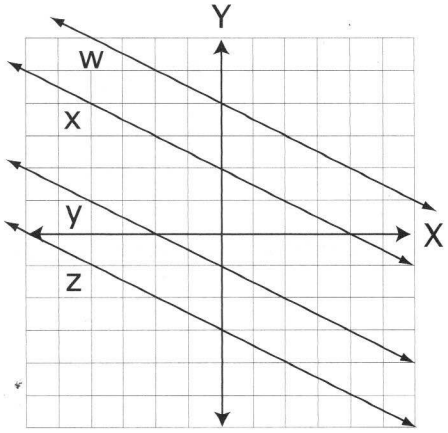
2. Write the slope-intercept formula for lines *w*, *x*, *y*, and *z*.

line *w*. m = ___, b = ___, Y = _____

line *x*. m = ___, b = ___, Y = _____

line *y*. m = ___, b = ___, Y = _____

line *z*. m = ___, b = ___, Y = _____



Be sure all the equations are in the slope–intercept form before comparing the slopes. There may be more than one answer for some of these questions.

3. Which of the following lines are parallel to $Y = -3X + 2$?

   A. $Y = 1/3\ X - 2$

   B. $Y = -3X$

   C. $Y = 4 - 3X$

4. Which of the following lines are parallel to $Y = 1/2\ X - 5$?

   A. $Y = 1/4\ X + 5$

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

   C. $Y = 4 + 4/8\ X$

5. Which of the following lines are parallel to $2Y - 3X = 4$?

   A. $Y = 2/3\ X + 4$

   B. $Y = 6/4\ X$

   C. $2Y = 8 - 3X$

6. Which of the following lines are parallel to $3Y + 4X = -6$?

   A. $Y = 12/9\ X - 1$

   B. $3Y = -4X + 0$

   C. $-2Y = 5X - 8$

7. Change $-Y + 2X = 4$ to the slope-intercept form of the equation of a line.

8. Change $Y - 4X = 0$ to the slope-intercept form of the equation of a line.

9. Change $-2Y - X = -2$ to the slope-intercept form of the equation of a line.

10. Change $3Y - 2X = -6$ to the slope-intercept form of the equation of a line.

11. Change $-4Y - 3X = -8$ to the slope-intercept form of the equation of a line.

12. Change Y = -5/3 X - 2 to the standard form of the equation of a line.

13. Change Y = 4X - 3 to the standard form of the equation of a line.

14. Change Y = 1/4 X + 3 to the standard form of the equation of a line.

15. Change Y = -3/5 X - 1 to the standard form of the equation of a line.

16. Change Y = 3X to the standard form of the equation of a line.