

Algebra I

5.4 Classwork

Standard Form and Slope-Intercept Form

NAME: _____

DATE: _____ HOUR: _____

See page 237.

SUMMARY OF THE FORMS OF A STRAIGHT LINE

Name	Form	Example
Slope-Intercept		
Standard		
Point-slope		

(on page 237)

2. Find the intercepts for the equation $3x + 6y = 18$.

$$\begin{array}{c|c} x & y \\ \hline 0 & 0 \end{array}$$

(0,) is the y-intercept
(, 0) is the x-intercept

5. Use the point-slope formula to write the equation of the line.

$$m = \text{_____} = \quad y - \text{___} = \text{___} (x - \text{___})$$

6. Find the slope of the line using the intercepts.

$$m = \text{_____} =$$

$$\begin{array}{c|c} x & y \\ \hline 0 & 0 \end{array}$$

(on page 238)

15.
$$\begin{array}{c|c} x & y \\ \hline 0 & 0 \end{array}$$

(0,) is the y-intercept
(, 0) is the x-intercept

16.
$$\begin{array}{c|c} x & y \\ \hline 0 & 0 \end{array}$$

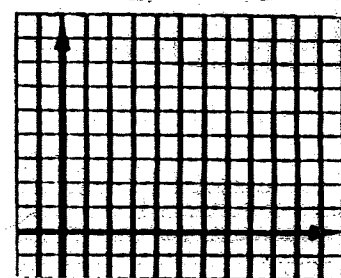
(0,) is the y-intercept
(, 0) is the x-intercept

17.
$$\begin{array}{c|c} x & y \\ \hline 0 & 0 \end{array}$$

(0,) is the y-intercept
(, 0) is the x-intercept

20. Graph the line by finding the intercepts.

$$\begin{array}{c|c} x & y \\ \hline 0 & 0 \end{array}$$



21. Find the slope of the line using the intercepts.

$$m = \text{_____} =$$

$$\begin{array}{c|c} x & y \\ \hline 0 & 0 \end{array}$$

(on page 238)

24. Write the equation in point-slope form. _____
26. Write the equation in point-slope form. _____
29. Write the equation in point-slope form. _____
38. _____

(on page 239)

42. student tickets are \$3 and adult tickets are \$5
Write a standard form equation. _____
43. If 90 student tickets are sold, _____ adult tickets must be sold for the total sales to be \$700.
44. If 80 adult tickets are sold, _____ student tickets must be sold for the total sales to be \$700.
49. _____
50. _____
51. _____
52. _____
54. $y = \underline{\hspace{1cm}}$ check your work $-5(\) = 30$
55. $x = \underline{\hspace{1cm}}$ check your work $3(\) = 420$
56. $y = \underline{\hspace{1cm}}$ check your work $\frac{\ }{9} = 36$
57. $x = \underline{\hspace{1cm}}$ check your work $\frac{\ }{2} = 108$
62. _____
63. _____
64. Explain your solution in the space below.