

Practice: Convert Linear Equations From Standard Form

1. Write each equation in slope y -intercept form.
 - a) $4x + y - 2 = 0$
 - b) $3x - y + 3 = 0$
 - c) $2x - y + 3 = 0$
 - d) $5x + y + 4 = 0$
 - e) $x + y + 1 = 0$
2. Write each equation in slope y -intercept form then state the slope and y -intercept.
 - a) $2x - y - 1 = 0$
 - b) $x + y + 5 = 0$
 - c) $4x - 2y + 6 = 0$
 - d) $6x - 2y - 4 = 0$
 - e) $x + y = 0$
3. Write each equation in slope y -intercept form then state the slope and y -intercept.
 - a) $x - y + 3 = 0$
 - b) $3x + 3y - 6 = 0$
 - c) $x + y + 2 = 0$
 - d) $x - y - 1 = 0$
 - e) $x - y = 0$
4. Rewrite each equation in slope y -intercept form.
 - a) $2x + y - 4 = 0$
 - b) $4x + y + 3 = 0$
 - c) $2y + 8 = 0$
 - d) $x + y = 0$
 - e) $6x + 2y - 4 = 0$
5. For the equation $2x - y + 8 = 0$,
 - a) Make a table of values and graph the equation
 - b) Identify the slope and the y -intercept
 - c) Rewrite the equation in slope y -intercept form.
6. The line $6x + 8y + C = 0$ passes through $(2, 4)$. Determine the value of C .
7. The line $Ax + 2y - 6 = 0$ passes through $(3, 4)$. Determine the value of A .
8. The movie theatre charges \$5 for children and \$10 for adults for one movie.
 - a) Write an equation to represent the total ticket sales. T represents total ticket sales in dollars, C represents the number of child tickets sold, and A represents the number of adult tickets sold.
 - b) What is T , if 40 child tickets and 60 adult tickets were sold?
 - c) Rearrange the equation to isolate C . How many child tickets were sold, if the total sales was \$2500 and 150 adult tickets were sold?
 - d) Rearrange the equation to isolate A . Find the number of adult tickets sold if total sales were \$3500 and 250 child tickets were sold.