

7.1 and 7.2 Extension Activity

1. Write the equation in slope intercept form of a line with the same slope as the line $x + 4y + 8 = 0$ and the same y-intercept as the line $2x - 3y + 12 = 0$.
2. The equations $x + 4y = n$ and $5x - 2y = 10$ have the same y-intercept. What is the value of n ?
3. A graph of $6x - ny = 8$ and $2x + 3y = 12$ have the same slope. What is the value of n ?
4. The equation of a line is $x + 3y - 24 = 0$. Write the coordinates of a point on the line for each of the following conditions.
 - a) The x-coordinate is equal to the y-coordinate.
 - b) The x-coordinate is three times as great as the y-coordinate.
 - c) The y-coordinate is four times greater than the x-coordinate.