# Solving Systems of Equations in Three Variables #1

Solve each system of equations.

1. $4x + 2y + z = 7$
   $2x + 2y - 4z = -4$
   $x + 3y - 2z = -8$

2. $x + 2y + 3z = 5$
   $3x + 2y - 2z = -13$
   $5x + 3y - z = -11$

Write the standard form of the equation that is parallel to the given equation and passes through the given point.

$y = 3x + 6; (4,7)$

Write the standard form of the equation that is perpendicular to the given equation and passes through the given point.

$y = 2x - 3; (-5,3)$