Simplify all answers and show your work.

1. Write the equation of the line through the point (-3, 4) and with slope $\frac{2}{5}$.

2. Write the equation of the line through the point (9, 8) and parallel to the line $x - 2y = 10$.

3. What is the slope of a line that is perpendicular to the line given by $3x + 7y = -2$?

4. Graph the inequality $x - 3y \leq -3$

5. Given $f(x) = 3x - 5$, find $f(-2)$

6. Given $f(x) = x^2 + 1$, find $f(x - 2)$

7. Write the equation of the line that passes through the points (1, 2) and (3, 4).

8. Solve the system of equations:
   \[
   \begin{system}
   3x - y &= -15 \\
   4x + 5y &= -1
   \end{system}
   \]
9. Solve the system of equations:

\[
\begin{align*}
  x + y + z &= 5 \\
  2x - y + z &= 6 \\
  x + 2y - z &= -3
\end{align*}
\]

10. Solve the system of equations:

\[
\begin{align*}
  2x + y &= 19 \\
  y &= 10 - x
\end{align*}
\]

11. Kelly has 36 coins in her purse, only nickels and quarters. She has eight more quarters than nickels. If she has a total of $6.20, how many nickels and quarters does she have?

12. Solve the determinant

\[
\begin{vmatrix}
  2 & -4 \\
  3 & 5
\end{vmatrix}
\]

13. Solve the determinant

\[
\begin{vmatrix}
  0 & -1 & 3 \\
  4 & 5 & 4 \\
  2 & -2 & 0
\end{vmatrix}
\]