Unit 13.2 Solving Systems of Equations Using Substitution and Elimination

1. Solve the following systems of equations using substitution
   a. $8x - y = 29$

      $2x + y = 11$

   b. $6r - 5s = 12$

      $s + 6r = 48$

   c. $3x + 2y = 0$

      $5x - 2y = 8$

   d. $2x + 2y = 15$

      $x + y = 3$

e. $\frac{1}{2}x + y = -4$

$3x - 4y = 6$

f. $x = 3y + 4$

$y = 6 - 2x$

g. $3y + z = 1$

$6y + 2z = 3$

h. $\frac{1}{6}x - \frac{1}{12}y = -\frac{13}{6}$

$\frac{1}{5}x + \frac{1}{4}y = 2$

2. Solve the systems of equation using <u>elimination</u>

   a. $x + 4y = 11$

      $5x - 2y = 11$

   b. $3x - 2y = 1$
      $2x + y = 10$

   c. $2x + 3y = 16$
      $x - y = -9$

   d. $2x + y = 1$
      $5x + 3y = 6$

   e. $2x + 7y = 11$
      $3x - y = 4$

f. $3x = 15 + 2y$
$5x + 6y = 3$

g. $3w = 13 + 5z$
$4w - 7z - 17 = 0$

h. $29.1x - 47.6y = 42.8$
$11.5x + 72.7y = 25.8$