Solve each system of equations using substitution.
Give the answer as an ordered pair.

1. $y = 1.2x - 2$

$y = -4.8x + 19$

$1.2x - 2 = -4.8x + 19$
$+4.8 \qquad +4.8$

$6x - 2 = 19 \qquad y = 1.2x - 2$
$+2 +2 \qquad y = 1.2(3.5) - 2$
$\dfrac{6x}{6} = \dfrac{21}{6} \qquad y = 2.2$

$x = 3.5 \quad (3.5, 2.2)$

2. $h = 3g - 1 \quad 3 \cdot -4 - 1$
$7g - 3h = 11 \quad -12 - 1$
$\quad -13$

$7g - 3(3g - 1) = 11$

$7g - 9g + 3 = 11$

$-2g = 8 \qquad \boxed{g = 4}$
$\dfrac{-2g}{-2} = \dfrac{8}{-2} \qquad \boxed{h = 13}$

$(-4, 13)$

3. Solve using substitution. Give the answer as an ordered pair.
$5x + 9y = 44 \qquad 3x - 6y = -42 + 6y$
$\qquad\qquad +6y$

$5(-14 + 2y) + 9y = 44 \qquad 3x = -42 + 6y$
$-70 + 10y + 9y = 44 \qquad \dfrac{}{3}$
$-70 + 19y = 44 + 70 \qquad x = -14 + 2y$
$+70 \qquad\qquad x = -14 + 2(6) \quad (-2, 6)$
$\dfrac{19y}{19} = \dfrac{114}{19} \qquad \boxed{x = -2}$
$\boxed{y = 6}$

4. Each can of Coke costs $1.50 and each Gatorade costs $2.00. Iman bought a total of 24 drinks and spent a total of $45. Write a system of equations and solve to find how many of each drink Iman purchased.

$45 = 1.50c + 2g \qquad 24 = c + g$
$\qquad\qquad\qquad\qquad 24 - g = c$

$45 = 1.50(24 - g) + 2g$
$45 = 36 - 1.5g + 2g \qquad \boxed{g = 18}$
$45 = 36 + .5g \qquad\qquad \boxed{c = 6}$
$\dfrac{-36 \quad -36}{} \qquad \dfrac{9}{.5} = \dfrac{.5g}{.5}$