

Lesson 6-2C - Solving Systems using Substitution

Due Today: p.284 #9-14 all, #24

9. (4, 20)

10. ($\frac{3}{4}$, $9\frac{3}{8}$)

11. (2, 0)

12. ($7\frac{7}{17}$, $11\frac{8}{17}$)

13. (6, -2)

14. (3, -2)

24. D

Due Tuesday: p.284 #22

$$h = 6g - 4 = 6(4) - 4 = 20$$

$$h = -2g + 28$$

$$\begin{array}{r} 6g - 4 = -2g + 28 \\ +2g \quad \quad \quad +2g \\ \hline 8g - 4 = 28 \end{array}$$

$$8g - 4 = 28$$

$$\begin{array}{r} 8g = 32 \\ \hline g = 4 \end{array}$$

(4, 20)

$$c = (3d - 27)$$

$$4d + 10c = 120$$

$$4d + 10(3d - 27) = 120$$

$$4d + 30d - 270 = 120$$

$$\begin{array}{r} 34d \\ \hline 34 \\ \hline \end{array}$$

$$\begin{array}{r} 390 \\ \hline 34 \\ \hline 195 \\ \hline 17 \end{array}$$

$d = 17$

Name:
Period:
Date:

1) Solve the system of equations using substitution.

$$\underline{y} = 3x - 4$$

$$\underline{y} + 2x = 1$$

$$y = 3(1) - 4$$
$$3 - 4$$

$$3x - 4 + 2x = 1$$
$$y = -1$$

$$5x - 4 = 1$$
$$+4 \quad +4$$

(1st)

$$\frac{5x}{5} = \frac{5}{5} \quad x = 1$$

22. A farmer grows only sunflowers and flax on his 240-acre farm. This year he wants to plant 80 more acres of sunflowers than of flax. How many acres of each crop does the farmer need to plant?



Sunflower



Flax

**Banker Emilio has 24 coins in his pocket.
He only has dimes and nickels.
They total \$1.35.
How many dimes does he have?**