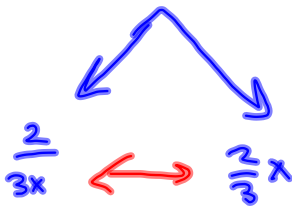


Ambig. means "ambiguous"

$\frac{2}{3}x = \text{what?}$



$(\frac{2}{3})x$ is OK

Points are how I communicate with you.

I view homework as FORMATIVE, rather than SUMMATIVE

→ You learn it.

→ Did you learn it?

Quizzes say a little more about how well you've learned. Part Summative / Part Formative.

Tests weigh the most

Rarely do worse on Tests if you've using Homework & Quiz as LEARNING TOOLS.

MIDTERM thru C5 stuff S's.S
Wednesday after Spring Break.
Homework C4!

what's LCD of 8 & 6?

$$\begin{array}{l} \downarrow \\ 2 \overline{) 8} \\ 2 \overline{) 6} \\ 2 \\ 2 \end{array} \quad \begin{array}{l} 2 \overline{) 6} \\ 3 \end{array}$$

$$2 \cdot 2 \cdot 2 \cdot 3 = 24 = \text{LCD}$$

④ $\left\{ \begin{array}{l} \text{Let } x = \text{amt of cashew mix (in lbs)} \\ \text{\& } y = \text{.. .. peanuts} \end{array} \right.$

Let $x =$ the # of pounds of cashew mix.
 $y =$ " " " " " " peanuts mix.

$$\text{TOTAL WT: } x + y = 50$$

$$\text{Total cost: } 2x + 1.5y = (1.8)(50)$$

$$x \text{ lbs} + y \text{ lbs} = 50 \text{ lbs}$$

$$\frac{2^{\cancel{\text{\$}}}}{\cancel{\text{lb}}} x \cancel{\text{ lbs}} + \frac{1.5^{\cancel{\text{\$}}}}{\cancel{\text{lb}}} y \cancel{\text{ lbs}} = \frac{1.8^{\cancel{\text{\$}}}}{\cancel{\text{lb}}} \cdot 50 \cancel{\text{ lbs}}$$

Units check out.

#6

words

Let $x =$ amt invested in T-Bills (\$)

 $y =$ T-Bonds (\$)

 $z =$ C-Bonds (\$)

TOTAL INVEST

Profit
weirdo

$$x + y + z = 10000$$

$$.06x + .07y + .08z = 680$$

$$z = \frac{1}{2}x$$

T-Bills 6%

T-Bonds 7%

C-Bonds 8%

weird one:

The amt invested in C-Bonds must
be $\frac{1}{2}$ the amt invested in T-Bills.

z must be $\frac{1}{2}x$

$$z = \frac{1}{2}x$$

Pg 3

$$\begin{aligned}x + y - z &= 5 \\4x - y + 3z &= 10 \\8x - 2y + 6z &= 10\end{aligned}$$



$$\begin{aligned}x + y - z &= 5 \\-4R_1 + R_2 & \quad -5y + 7z = -10 \\-8R_1 + R_3 & \quad -10y + 14z = -30 \\ \hline x + y - z &= 5 \\-5y + 7z &= -10 \\-2R_2 + R_3 & \quad 0 = -10\end{aligned}$$

$$0 = -10$$

$$\rightarrow 0 = -10 ?$$

No Solution.

What I'm looking for. If you're unorthodox, leave good breadcrumbs.

$$\begin{array}{rcl} x & -y & +2z = 3 \\ 4x & +y & -z = 8 \\ 3x & -y & +z = 6 \end{array}$$

$$\begin{array}{rcl} x - y + 2z = 3 & & \\ -4R_1 + R_2 & 5y - 9z = -4 & \\ -3R_1 + R_3 & 2y - 5z = -3 & \end{array}$$

$$\begin{array}{rcl} x - y + 2z = 3 & & \\ 5y - 9z = -4 & & \\ -2R_2 + 5R_3 & -7z = -7 & \end{array}$$

$$\begin{array}{rcl} x - 1 + 2(1) = 3 & & \\ x + 1 = 3 & & \\ x = 2 & & \end{array}$$

$$\begin{array}{rcl} 5y - 9(1) = -4 & & \\ 5y = 5 & & \\ y = 1 & & \end{array}$$

$$\begin{array}{rcl} x - y + 2z = 3 & & \\ 5y - 9z = -4 & & \\ -7z = -7 & & \\ z = 1 & & \end{array}$$

$$(x, y, z) \in \{ (2, 1, 1) \}$$

$$(x, y, z) = (2, 1, 1)$$

Unique Sol'n

$$\begin{aligned}x - 2y - 4z &= -19 \\ 2x - 3y - 7z &= -27 \\ -3x + 4y + 10z &= 35\end{aligned}$$

$$\begin{aligned}x - 2y - 4z &= -19 \\ 2R_1 + R_2 & \quad y + z = 11 \\ 3R_1 + R_3 & \quad -2y - 2z = -22\end{aligned}$$

$$\begin{aligned}x - 2y - 4z &= -19 \\ y + z &= 11 \\ 2R_2 + R_3 & \quad 0 = 0\end{aligned}$$

Undetermined.

2 equations, 3 variables
 \Rightarrow one extra variable.
 z is free

$z = \text{any real } \#$

$$y + z = 11$$

$$y = -z + 11$$

x & y depend on z

z is independent

$$x - 2y - 4z = -19$$

$$x - 2(-z + 11) - 4z = -19$$

$$x + 2z - 22 - 4z = -19$$

$$x - 2z - 22 = -19$$

$$x - 2z = 3$$

$$x = 2z + 3$$

$(x, y, z) \in \{ (2z + 3, -z + 11, z) \mid z \text{ is Real} \}$
 is the general solution

$(3, 11, 0)$ is a PARTICULAR solution
 corresponding to $z = 0$.