

Did You Hear About...

A	B	C	D	E	F
G	H	I	J	K	L
					?

Solve each system of equations below using multiplication with the addition method. Find the solution in the answer column and notice the word next to it. Write this word in the box containing the letter of that exercise. Keep working and you will hear about some "udder" nonsense.

(A) $5x - 2y = 4$
 $3x + y = 9$
 (2, 3)

(B) $3x - 5y = 13$
 $x - 2y = 5$
 (1, -2)

(C) $7x + 2y = -1$
 $3x - 4y = 19$
 (1, -4)

(D) $x + 2y = 6$
 $5x + 3y = 2$
 (-2, 4)

(E) $2x + 3y = 7$
 $3x + 4y = 10$
 (2, 1)

(F) $7x - 3y = -5$
 $3x + 2y = 11$
 (1, 4)

(G) $3x - 5y = 7$
 $5x - 2y = -1$
 (-1, -2)

(H) $4x + 3y = 9$
 $3x + 4y = 12$
 (0, 3)

(I) $5x - 3y = 16$
 $4x + 5y = -2$
 (2, -2)

(J) $4x - 3y = -20$
 $-x - 8y = 5$
 (-5, 0)

(K) $-3x + 7y = -1$
 $-2x + 5y = 0$
 (5, 2)

(L) $5x + 6y = -11$
 $3x + y = -4$
 (-1, -1)

TWEET (1, 2)

HIS (2, 1)

SELLING (-5, 0)

BIRDSEED (-1, -2)

UDDER (2, 0)

THE (2, 3)

SINGING (-5, 4)

STARTED (2, -2)

FED (-2, 4)

BUTTER (-1, 3)

COWS (1, 4)

MILK (-1, -1)

FARMER (1, -2)

AND (0, 3)

WINGS (2, -4)

WHO (1, -4)

MOO (1, 3)

CHEEP (5, 2)

BEEF (3, -2)

$$\begin{array}{r} 5x - 2y = 4 \\ + 6x + 2y = 18 \\ \hline 11x = 22 \\ x = 2 \\ y = 3 \end{array}$$

$$\begin{array}{r} 3x - 5y = 13 \\ -3x + 6y = -15 \\ \hline y = -2 \\ x = 1 \end{array}$$

$$\begin{array}{r} +14x + 4y = -2 \\ 3x - 4y = 19 \\ \hline 17x = 17 \\ x = 1, y = -4 \end{array}$$

$$\begin{array}{r} -5x - 10y = -30 \\ 5x + 3y = 2 \\ \hline -7y = -28 \\ y = 4 \\ x = -2 \end{array}$$

$$\begin{array}{r} 6x + 9y = 21 \\ -6x - 8y = -20 \\ \hline y = 1 \end{array}$$

$$\begin{array}{r} -3(7x - 3y = -5) \\ 7(3x + 2y = 11) \\ \hline -21x + 9y = 15 \\ 21x + 14y = 77 \\ \hline 23y = 92 \\ y = 4 \\ x = 1 \end{array}$$

$$\begin{array}{r} -5(3x - 5y = 7) \\ 3(5x - 2y = -1) \\ \hline -15x + 25y = -35 \\ 15x - 6y = -3 \end{array}$$

$$\begin{array}{r} -3(4x + 3y = 9) \\ + (3x + 4y = 12) \\ \hline -12x - 9y = -27 \\ 12x + 16y = 48 \\ \hline 7y = 21 \\ y = 3 \\ x = 0 \end{array}$$

$$\begin{array}{r} \textcircled{1} -20x + 12y = 64 \\ 20x + 25y = 0 \\ \hline 37y = -74 \\ y = -2 \\ (2, -2) \quad x = 2 \end{array}$$

$$\begin{array}{r} -15x + 25y = -35 \\ 15x - 6y = -3 \\ \hline 19y = -38 \\ y = -2 \\ x = 1 \end{array}$$

$$\begin{array}{r} \textcircled{J} 4x - 3y = -20 \\ -4x - 32y = 20 \\ \hline (-5, 0) \quad y = 0 \\ x = 5 \end{array}$$

$$\begin{array}{r} \textcircled{K} 6x - 14y = 2 \\ -6x + 15y = 0 \\ \hline (5, 2) \quad y = 2 \\ x = 5 \end{array}$$

$$\begin{array}{r} \textcircled{L} 15x + 18y = -33 \\ +5x + 5y = 20 \\ \hline 18y = \end{array}$$

$$\begin{array}{r} 5x + 6y = -11 \\ \del{3x + 6y = -4} \\ -18x - 6y = 24 \quad (-1, -1) \\ \hline -13x = 13 \quad y = -1 \\ x = -1 \end{array}$$

$$\begin{aligned} 13) \quad & 16x - 10y = 10 \\ & -8x - 6y = 6 \end{aligned}$$

$$(0, -1)$$

$$\begin{aligned} 14) \quad & 8x + 14y = 4 \\ & -6x - 7y = -10 \end{aligned}$$

$$(4, -2)$$

$$\begin{aligned} 15) \quad & -4x - 15y = -17 \\ & -x + 5y = -13 \end{aligned}$$

$$(8, -1)$$

$$\begin{aligned} 16) \quad & -x - 7y = 14 \\ & -4x - 14y = 28 \end{aligned}$$

$$(0, -2)$$

$$\begin{aligned} 17) \quad & -7x - 8y = 9 \\ & -4x + 9y = -22 \end{aligned}$$

$$(1, -2)$$

$$\begin{aligned} 18) \quad & 5x + 4y = -30 \\ & 3x - 9y = -18 \end{aligned}$$

$$(-6, 0)$$

$$\begin{aligned} 19) \quad & -4x - 2y = 14 \\ & -10x + 7y = -25 \end{aligned}$$

$$(-1, -5)$$

$$\begin{aligned} 20) \quad & 3x - 2y = 2 \\ & 5x - 5y = 10 \end{aligned}$$

$$(-2, -4)$$

$$\begin{aligned} 21) \quad & 5x + 4y = -14 \\ & 3x + 6y = 6 \end{aligned}$$

$$(-6, 4)$$

$$\begin{aligned} 22) \quad & 2x + 8y = 6 \\ & -5x - 20y = -15 \end{aligned}$$

same lines

infinite number of solutions

$$\begin{aligned} 23) \quad & -14 = -20y - 7x \\ & 10y + 4 = 2x \end{aligned}$$

$$(2, 0)$$

$$\begin{aligned} 24) \quad & 3 + 2x - y = 0 \\ & -3 - 7y = 10x \end{aligned}$$

$$(-1, 1)$$

$$\begin{array}{r} 13) 16x - 10y = 10 \\ -16x - 12y = 12 \\ \hline \end{array}$$

$$\begin{array}{r} -22y = 22 \\ y = -1 \end{array}$$

$$(0, -1)$$

$$\begin{array}{r} 14) 8x + 14y = 4 \\ -12x - 14y = -20 \\ \hline \end{array}$$

$$\begin{array}{r} -4x = -16 \\ x = 4 \end{array}$$

$$(4, -2)$$

$$\begin{array}{r} 15) -4x - 15y = -17 \\ 4x - 20y = 52 \\ \hline \end{array}$$

$$\begin{array}{r} -35y = 35 \\ y = -1 \end{array}$$

$$(8, -1)$$

$$16) \text{ wrong}$$

$$\begin{array}{r} 4x + 28y = -56 \\ -4x - 14y = 28 \\ \hline \end{array}$$

$$\begin{array}{r} 14y = -28 \\ y = -2 \end{array}$$

$$(0, -2)$$

$$\begin{array}{r} 17) 28x + 32y = -36 \\ -28x + 63y = -154 \\ \hline \end{array}$$

$$\begin{array}{r} 95y = -190 \\ y = -2 \end{array}$$

$$(1, -2)$$

$$\begin{array}{r} 18) -15x - 12y = 90 \\ 15x - 45y = -90 \\ \hline \end{array}$$

$$y = 0$$

$$(-6, 0)$$

$$\begin{array}{r} 19) 20x + 10y = -70 \\ -20x + 14y = -50 \\ \hline \end{array}$$

$$\begin{array}{r} 24y = -120 \\ y = -5 \end{array}$$

$$(-1, -5)$$

$$(0, -5)$$

$$\begin{array}{r} 22) 10x + 40y = 30 \\ -10x - 40y = -30 \\ \hline \end{array}$$

$$\begin{array}{r} 20) -15x + 10y = -10 \\ 15x - 15y = 30 \\ \hline \end{array}$$

$$\begin{array}{r} -5y = 20 \\ y = -4 \end{array}$$

$$x = -2$$

$$(-2, -4)$$

$$\begin{array}{r} 21) 15x + 12y = -42 \\ -15x - 30y = -70 \\ \hline \end{array}$$

$$\begin{array}{r} -18y = -72 \\ y = 4 \end{array}$$

$$(-6, 4)$$

$$\begin{array}{r} 23) -7x - 20y = -14 \\ -2x + 10y = -4 \\ \hline \end{array}$$

$$+ \begin{array}{r} -4x + 20y = -8 \\ \hline \end{array}$$

$$\begin{array}{r} -11x = -22 \\ x = 2 \end{array}$$

$$(2, 0)$$

$$\begin{array}{r} 24) 2x - y = -3 \\ 10x + 7y = -3 \\ \hline \end{array}$$

$$+ \begin{array}{r} -10x + 5y = 15 \\ \hline \end{array}$$

$$\begin{array}{r} 12y = 12 \\ y = 1 \end{array}$$

$$(-1, 1)$$