

Dick 5

Did You Hear About...

A The	B farmer	C who	D fed	E his	F cows
G birdseed	H and	I started	J selling	K cheep	L milk?

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) $5x - 2y = 4$
 $2(3x + y = 9)$ (2, 3)
- (B) $3x - 5y = 13$
 $-3(x - 2y = 5)$ (1, -2)
- (C) $2(7x + 2y = -1)$
 $3x - 4y = 19$ (1, -4)
- (D) $5(x + 2y = 6)$
 $5x + 3y = 2$ (-2, 4)
- (E) $3(2x + 3y = 7)$
 $-2(3x + 4y = 10)$ (2, 1)
- (F) $2(7x - 3y = -5)$
 $3(3x + 2y = 11)$ (1, 4)
- (G) $3x - 5y = 7$
 $5x - 2y = -1$ (-1, -2)
- (H) $3(4x + 3y = 9)$
 $-4(3x + 4y = 12)$ (0, 3)
- (I) $5(5x - 3y = 16)$
 $3(4x + 5y = -2)$ (2, -2)
- (J) $4x - 3y = -20$
 $4(-x - 8y = 5)$ (-5, 0)
- (K) $2(-3x + 7y = -1)$
 $-3(-2x + 5y = 0)$ (5, 2)
- (L) $5x + 6y = -11$
 $-6(3x + y = -4)$ (-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)

Set up system for all, solve 3

What Kind of Monkey Can Fly?

Solve each problem below using a system of two equations in two variables. Find the solution in the answer column and notice the letter next to it. Write this letter in each box that contains the number of that exercise.

- ① Three times the larger of two numbers is equal to four times the smaller. The sum of the numbers is 21. Find the numbers.

$$\begin{aligned} x &= \text{larger \#} & 3x &= 4y & (12, 9) \\ y &= \text{smaller \#} & x + y &= 21 \end{aligned}$$

- ② The difference between two numbers is 16. Five times the smaller is the same as 8 less than twice the larger. Find the numbers.

$$\begin{aligned} x &= \text{larger \#} & x - y &= 16 & (24, 8) \\ y &= \text{smaller \#} & 5y &= 2x - 8 \end{aligned}$$

- ③ The larger of two numbers is 1 more than twice the smaller. The sum of the numbers is 20 less than three times the larger. Find the numbers.

$$\begin{aligned} x &= \text{larger \#} & x &= 1 + 2y & (13, 6) \\ y &= \text{smaller \#} & x + y &= 3x - 20 \end{aligned}$$

- ④ Two records and three tapes cost \$31. Three records and two tapes cost \$29. Find the cost of each record and each tape.

$$\begin{aligned} x &= \text{records} & 2x + 3y &= 31 & (\$5, \$7) \\ y &= \text{tapes} & 3x + 2y &= 29 \end{aligned}$$

- ⑤ The sum of two numbers is the same as four times the smaller number. If twice the larger is decreased by the smaller, the result is 30. Find the numbers.

$$\begin{aligned} x &= \text{larger \#} & x + y &= 4y & (18, 6) \\ y &= \text{smaller \#} & 2x - y &= 30 \end{aligned}$$

- ⑥ A group of students go out for lunch. If two have hamburgers and five have hot dogs, the bill will be \$8.00. If five have hamburgers and two have hot dogs, the bill will be \$9.50. What is the price of a hamburger?

$$\begin{aligned} x &= \text{hamburger} & 2x + 5y &= 8 & (1.5, 1) \\ y &= \text{hot dog} & 5x + 2y &= 9.5 & \$1.50 \end{aligned}$$

- ⑦ The price of a sweater is \$5 less than twice the price of a shirt. If four sweaters and three shirts cost \$200, find the price of each shirt and each sweater.

$$\begin{aligned} x &= \text{\$ shirt} & y &= 2x - 5 & (20, 35) \\ y &= \text{\$ sweater} & 4y + 3x &= 200 \end{aligned}$$

- ⑧ A shipment of TV sets, some weighing 30 kg each and the others weighing 50 kg each, has a total weight of 880 kg. If there are 20 TV sets all together, how many weigh 50 kg? $x = 30\text{kg TVs}$, $y = 50\text{kg TVs}$

2	4	8	6	2	1	5	7	2	7	8	8	3	(6, 14)
A	H	O	T	A	I	R	B	A	B	O	O	N	

(S)	22, 6	
(K)	16, 9	
(R)	18, 6	✓
(M)	11, 10	
(B)	\$20, \$35	✓
(I)	12, 9	✓
(P)	\$1.35	
(N)	13, 6	✓
(O)	14	✓
(T)	\$1.50	✓
(L)	\$8, \$5	
(A)	24, 8	✓
(D)	\$23, \$41	
(H)	\$5, \$7	✓
(E)	17	