

Did You Hear About...

A	The	B	Farmer	C	Who	D	Named	E	His	F	Pet
G	Rooster	H	Robinson	I	Because	J	it	K	crew	L	so

Answers for A-F:

(2, 0); (0, -6)	COW
(2, 0); (0, 3)	THE
(4, 0); (0, -2)	HIS
(-3, 0); (0, 5)	WHO
(4, 0); (0, -3)	DECIDED
(2, 0); (0, -4)	PET
(2, 0); (0, -3)	FARMER
(-3, 0); (0, -5)	NAMED

Answers for G-L:

(-6, 0); (0, - $\frac{3}{2}$)	BECAUSE
(-3, 0); (0, $\frac{3}{2}$)	SO
($\frac{5}{2}$, 0); (0, 5)	ROOSTER
(3, 0); (0, -4)	IT
(-3, 0); (0, $\frac{9}{2}$)	ROBINSON
(-3, 0); (0, 3)	CRACKED
(5, 0); (0, -2)	CREW
(-6, 0); (0, -2)	UP

Find the x-intercept and the y-intercept of the graph of each equation below. Then find your answer in the answer column nearest the exercise and notice the word under it. Write this word in the box containing the letter of that exercise. Keep working and you will hear about a novel name.

(A) $3x + 2y = 6$	(G) $2x + y = 5$
(B) $3x - 2y = 6$	(H) $-3x + 2y = 9$
(C) $-5x + 3y = 15$	(I) $-x - 4y = 6$
(D) $5x + 3y = -15$	(J) $4x - 3y - 12 = 0$
(E) $x - 2y = 4$	(K) $5y = 2x - 10$
(F) $-2x + y = -4$	(L) $x = 2y - 3$

9.4 Did you Hear About...

(A) $3x + 2y = 6$

<u>x int</u>	<u>y int</u>
$3x + 2(0) = 6$	$3(0) + 2y = 6$
$3x = 6$	$2y = 6$
$x = 2$	$y = 3$
$(2, 0)$	$(0, 3)$

(G) $2x + y = 5$

<u>x int</u>	<u>y int</u>
$2x + 0 = 5$	$2(0) + y = 5$
$2x = 5$	$y = 5$
$x = \frac{5}{2}$	
$(\frac{5}{2}, 0)$	$(0, 5)$

(B) $3x - 2y = 6$

<u>x int</u>	<u>y int</u>
$3x - 2(0) = 6$	$3(0) - 2y = 6$
$3x = 6$	$-2y = 6$
$x = 2$	$y = -3$
$(2, 0)$	$(0, -3)$

(H) $-3x + 2y = 9$

<u>x int</u>	<u>y int</u>
$-3x + 2(0) = 9$	$-3(0) + 2y = 9$
$-3x = 9$	$2y = 9$
$x = -3$	$y = \frac{9}{2}$
$(-3, 0)$	$(0, \frac{9}{2})$

(C) $-5x + 3y = 15$

<u>x int</u>	<u>y int</u>
$-5x + 3(0) = 15$	$-5(0) + 3y = 15$
$-5x = 15$	$3y = 15$
$x = -3$	$y = 5$
$(-3, 0)$	$(0, 5)$

(I) $-x - 4y = 6$

<u>x int</u>	<u>y int</u>
$-x - 4(0) = 6$	$-(0) - 4y = 6$
$-x = 6$	$-4y = 6$
$x = -6$	$y = -\frac{3}{2}$
$(-6, 0)$	$(0, -\frac{3}{2})$

9.4 Continued...

Ⓓ $5x + 3y = -15$

<u>x int</u>	<u>y int</u>
$5x + 3(0) = -15$	$5(0) + 3y = -15$
$5x = -15$	$3y = -15$
$x = -3$	$y = -5$
$(-3, 0)$	$(0, -5)$

Ⓙ $4x - 3y - 12 = 0$ ⁺¹² ⁺¹²

<u>x int</u>	<u>y int</u>
$4x - 3(0) = 12$	$4(0) - 3y = 12$
$4x = 12$	$-3y = 12$
$x = 3$	$y = -4$
$(3, 0)$	$(0, -4)$

Ⓔ $x - 2y = 4$

<u>x int</u>	<u>y int</u>
$x - 2(0) = 4$	$(0) - 2y = 4$
$x = 4$	$-2y = 4$
	$y = -2$
$(4, 0)$	$(0, -2)$

Ⓚ $5y = 2x - 10$

<u>x int</u>	<u>y int</u>
$5(0) = 2x - 10$	$5y = 2(0) - 10$
$10 = 2x$	$5y = -10$
$5 = x$	$y = -2$
$(5, 0)$	$(0, -2)$

ⓕ $-2x + y = -4$

<u>x int</u>	<u>y int</u>
$-2x + 0 = -4$	$-2(0) + y = -4$
$-2x = -4$	$y = -4$
$x = 2$	
$(2, 0)$	$(0, -4)$

Ⓛ $x = 2y - 3$

<u>x int</u>	<u>y int</u>
$x = 2(0) - 3$	$0 = 2y - 3$
$x = -3$	$3 = 2y$
	$\frac{3}{2} = y$
$(-3, 0)$	$(0, \frac{3}{2})$