

Sami bought 2m of chain and 6m of wire for \$28. Micah bought 3m of wire and 5m of chain for \$22.

A customer has collected 61 store vouchers worth \$4.75. The vouchers come in denominations of \$0.10 and \$0.05.

 $\bigcirc$ 

(G)

Cam and Sam are twins mowing lawns for the summer. They each spent \$75 on a used lawn mower. Cam charges 10/lawn and Sam charges 12/lawn.

Private detective Q earns \$500 for every 4 days of work Detective R earns \$125.day. Two students are each walking at a speed of 5 m/s. The first student enters the crosswalk 3 seconds before the other.

On planet X 2 zerkels plus 1 zapdaw are worth 3. 10 zerkels have the same value as 15 less 5 zapdaws.

Credit card ABC charges a fee of \$5/month and 8% interest on the amount spent. Credit card XYZ charges a fee of \$2/month and 12% interest on the amount spent.

88 tickets were sold for a school raffle. Adult tickets were \$10 and child tickets were \$5. The total amount raised was \$700.

A large bird flies at a rate of 5km/hr. A small rodent can run 15 km in 3 hours. The rodent has a 1 km head start running from the bird.

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$$y = 5x$$

$$y = (15/3)x + 1$$

$$y = 12x + 75$$

$$y = 10x + 75$$

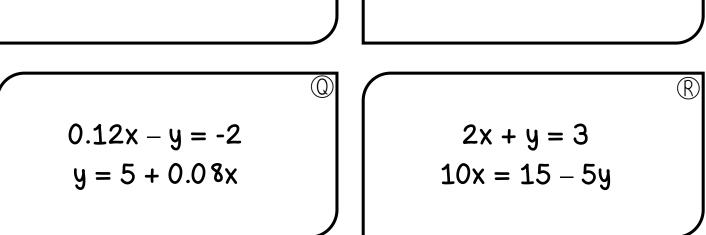
$$y = (500/4)x$$

$$x + y = 61$$

$$0.10x + 0.05y = 4.75$$

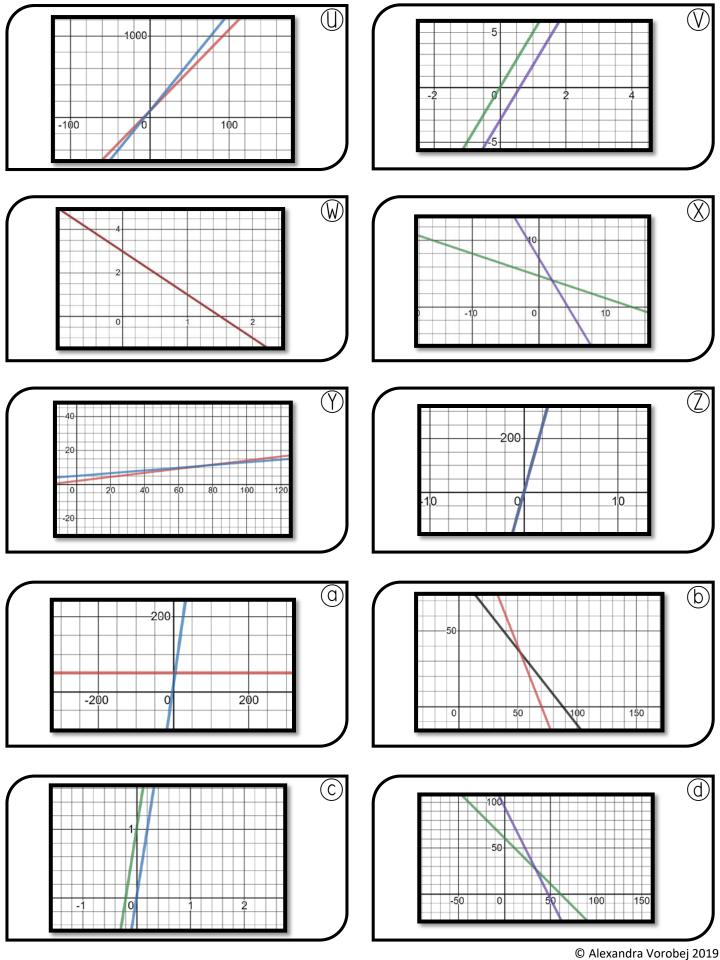
$$x + y = 88$$

$$10x + 5y = 700$$



y = 7x + 20

y = 125x



# Systems of Linear Equations – Recording Sheet

Situation	Equations	# of Solutions	Sketch the Graph
A			
B			
©			
(D)			
E			

Version A – record by hand (1)

# Systems of Linear Equations – Recording Sheet

Situation	Equations	# of Solutions	Sketch the Graph
(F)			
<b>©</b>			
$\oplus$			
(Ī)			
J			

Version A – record by hand (2)

# Systems of Linear Equations – Answers (quick reference)

Situation	Equations	# of Solutions	Graph
A	P	one	a
B	<u>S</u>	one	<b>X</b>
©	<b>(</b>	one	<b>d</b>
<b>D</b>	M	one	<u> </u>
E	0	infinite	2
Ē	1	none	V
G	R	infinite	W
$oldsymbol{\mathbb{H}}$	<b>Q</b>	one	Ŷ
(I)	N	one	b
J	<b>(K)</b>	none	©

# Systems of Linear Equations – Answers (full)

Situation	Equations	# of Solutions	Sketch the Graph
A	y = 50 $y = 7x + 20$	one	-200 Q 200
<b>B</b>	$ \begin{array}{c} \text{S} \\ 2x + 6y = 28 \\ 5x + 3y = 22 \end{array} $	one	X 10 0 10
©	x + y = 61 $0.10x + 0.05y = 4.75$	one	-50 0 50 100 150
<b>(D)</b>	y = 12x + 75 y = 10x + 75	one	-100 0 100
(E)	y = (500/4)x y = 125x	Infinite	200-

# Systems of Linear Equations – Answers (full)

Situation	Equations	# of Solutions	Sketch the Graph
(F)	y = 5x - 3 $y = 5x$	none	-2 0 2 4 -5
<b>©</b>	2x + y = 3 10x = 15 - 5y	infinite	<b>W</b>
$\oplus$	$   \begin{array}{c}                                     $	one	-40 -20 0 20 40 60 80 100 120 20
1	x + y = 88 10x + 5y = 700	one	0 50 100 150
J	y = 5x y = (15/3)x + 1	none	-1 0 1 2