Bellwork: Algebra 1

1. WELCOME BACK! :)
2. Write down your work for the week in your planner.
3. Write down your homework for the night.
4. You need your composition book and a ruler.
5. Answer the following question on your TUESDAY Bellwork:

How many solutions will the following system of equations have? How do you know?

$$y = 2x - 10$$
$$y = -3x - 10$$

y=2x+6 ← y intercept

1 solution because the slopes are different

1. 9

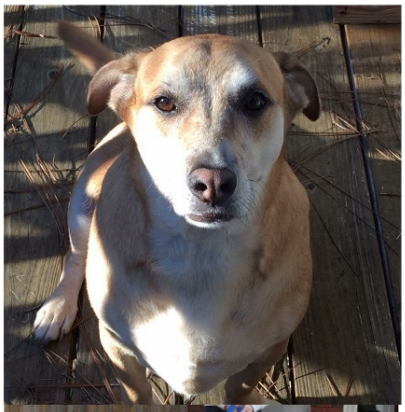
2. 2

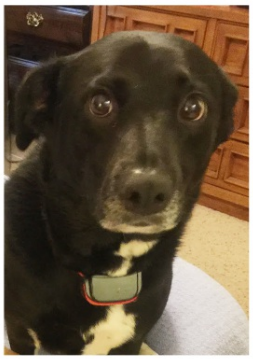
3. 4

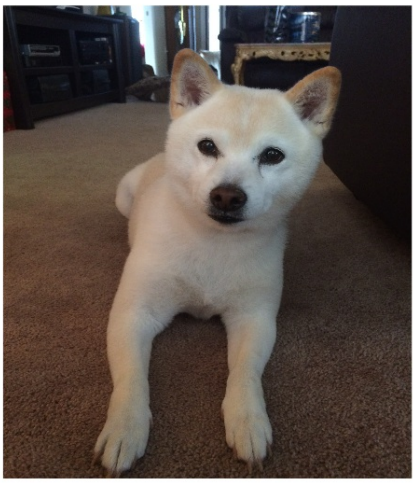

Washington
Oregon
Montana
North Dakota
Minnesota
Idaho
South Dakota
Wisconsin
Michigan
Wyoming
Nebraska
Iowa
Illinois
Pennsylvania
Nevada
Utah
Colorado
Kansas
Missouri
Indiana
Ohio
West Virginia
Kentucky
Arizona
New Mexico
Oklahoma
Arkansas
Tennessee
Mississippi
Georgia
Alabama
Texas
Louisiana
Florida
Hawaii
Alaska

4. 11

5. 6







6. 2


WASHINGTON
OREGON
CALIFORNIA
NEVADA
IDAHO
MONTANA
WYOMING
UTAH
ARIZONA
COLORADO
NEW MEXICO
NORTH DAKOTA
SOUTH DAKOTA
NEBRASKA
KANSAS
OKLAHOMA
TEXAS
MINNESOTA
IOWA
MISSOURI
ARKANSAS
LOUISIANA
WISCONSIN
ILLINOIS
MICHIGAN
INDIANA
OHIO
KENTUCKY
TENNESSEE
MISSISSIPPI
ALABAMA
GEORGIA
FLORIDA
SOUTH CAROLINA
NORTH CAROLINA
VIRGINIA
WEST VIRGINIA
PENNSYLVANIA
NEW YORK
MAINE
VERMONT
NEW HAMPSHIRE
MASSACHUSETTS
RHODE ISLAND
CONNECTICUT
NEW JERSEY
DELAWARE
MARYLAND


SWEDEN
NORTH SEA
DENMARK
BALTIC SEA
UNITED KINGDOM
NETHERLANDS
BERLIN
POLAND
GERMANY
BELGIUM
LUXEMBOURG
CZECH REPUBLIC
AUSTRIA
FRANCE
SWITZERLAND
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7. 2

8. 60

9. 5

10. 1

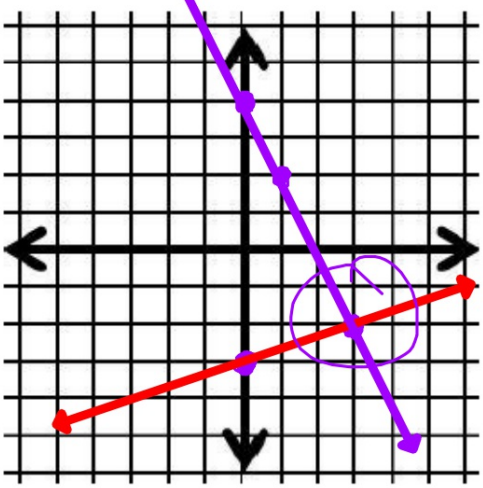
example 1:

Solve the following system of linear equations by graphing.

$$\begin{cases} y = \frac{1}{3}x - 3 \\ 2x + y = 4 \end{cases}$$

$y = mx + b$

$-2x \quad -2x \quad y = 4 - 2x \longleftrightarrow -2x + 4$



$(3, -2)$

$\frac{-2}{1}$

example 2:

Solve the following system of linear equations by graphing.

$$\begin{cases} 2x + y = -1 \\ 3y - 15 = 3x \end{cases}$$

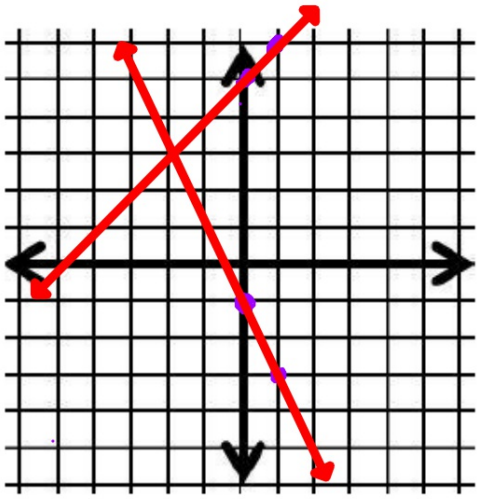
$y = -2x - 1$

$+15 \quad +15$

$\frac{3y}{3} = \frac{3x}{3} + \frac{15}{3}$

$y = 1x + 5$

$(-2, 3)$

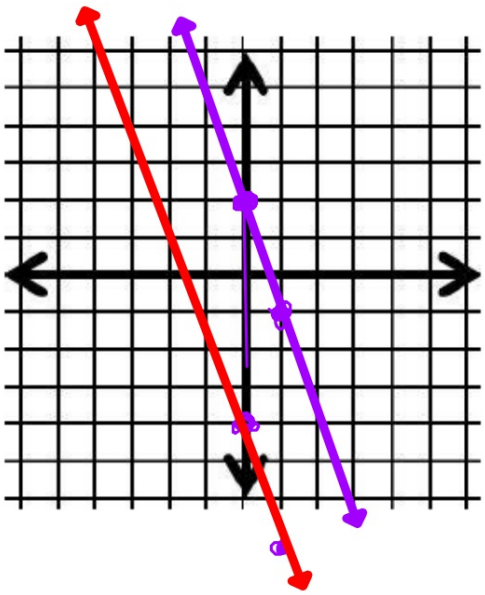


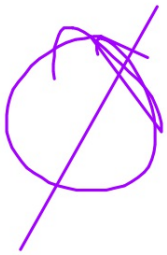
example 3:

Solve the following system of linear equations by graphing.

$$\begin{cases} y = -3x + 2 \\ 3x + y = -4 \end{cases}$$

$-3x \quad -3x \qquad y = -3x - 4$





example 4:

Solve the following system of linear equations by graphing.

$$\begin{cases} -x + 2y = -2 \\ 4y = 2x - 4 \end{cases}$$

$\frac{4y}{4} = \frac{2x}{4} - \frac{4}{4}$ $y = \frac{1}{2}x - 1$