



Essential Question: How do you identify and verify the values of x and y that simultaneously satisfy two linear equations?

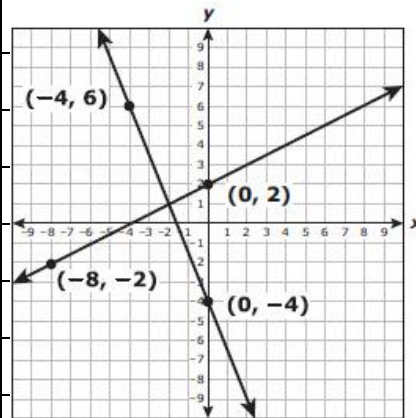
Questions:

Notes:

Verifying linear systems means to find the **x-value** and **y-value** that **simultaneously** satisfy two equations.

Simultaneous means **at the same time** .

To find the **solution** on a graph, find the **ordered pair** that represents where the two lines **intersect** .



These lines intersect at **(-2,1)**. This the **solution** to this system of linear equations.

You can also find the solution to a system of equations WITHOUT graphing by using **substitution**.

Which ordered pair is a solution to $y = -x + 4$ and $y = 3x$? (-1, 3) or (1, 3)

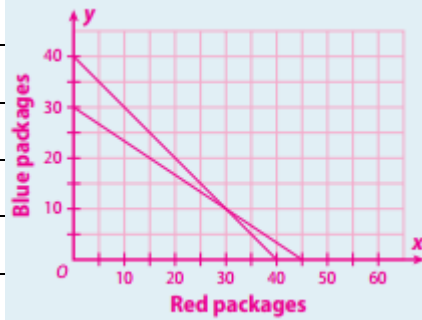
(1,3)

Which ordered pair is a solution to $y = 3x - 4$ AND $y = x + 2$? (3,5) or (5,3)

(3,5)

Summary:

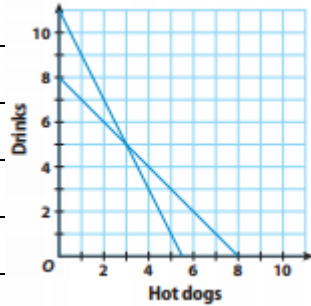
Questions:



Which ordered pair represents a solution to this system of equations? **(30, 10)**

The x-value means **30 red packages.**

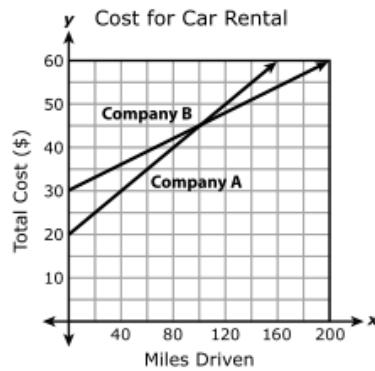
The y-value means **10 blue packages.**



Which ordered pair represents a solution to this system of equations? **(3, 5)**

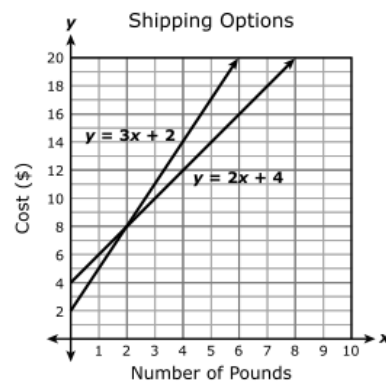
The x-value means **3 hot dogs.**

The y-value means **5 drinks.**



How many miles will it take for the cost of renting a car from either company to be the same? **100 miles**

When the cost of renting a car from either company is the same, how much will you pay to rent a car? **\$45**



Which ordered pair is a solution to this system of linear equations? **(2,8)**

The x-value means **2 pounds** and the y-value means **\$8.**

Summary: