Baseball

with Systems of Linear Equations

$$y = -3x + 7$$

$$y = 3x + 1$$

- Walk! Solve using Graphing.
- Double: set up the equations
- Triple: solve equations
- Home Run: if it's right!

$(1, 4)$

- Single: graphing
- Double: graph them
- Triple: look for intersection point
- Home Run: is it right?

$$5x + 4y = 6$$

$$-2x - 3y = -1$$

- Walk! Solve using Linear Combination.
- Double: set up the equations
- Triple: solve equations
- Home Run: if it's right!

$(2, -1)$

- Single: linear combination
- Double: multiply so you can cancel something
- Triple: solve for the two variables
- Home Run: is it right?

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

$$y = -3x$$

- Walk! Solve using Substitution.
- Double: set up the equations
- Triple: solve equations
- Home Run: if it's right!

$(-2,6)$

- Single: substitution
- Double: rewrite one equation so you can plug it in
- Triple: solve for the two variables
- Home Run: is it right?

$$2x + 2y = -10$$

$$3x - 6y = 12$$

- Single: choose a method to solve
- Double: set up the equations
- Triple: solve equations
- Home Run: if it's right!

$(-2, -3)$

- Single: graphing
- Double: graph them
- Triple: look for intersection point
- Home Run: is it right?

$(-2,-3)$

- Single: substitution
- Double: rewrite one equation so you can plug it in
- Triple: solve for the two variables
- Home Run: is it right?

$(-2, -3)$

- Single: linear combination
- Double: multiply so you can cancel something
- Triple: solve for the two variables
- Home Run: is it right?

$$x = -3y$$

$$2x + 4y = 10$$

- Single: choose a method to solve
- Double: set up the equations
- Triple: solve equations
- Home Run: if it's right!

(15, -5)

- Single: graphing
- Double: graph them
- Triple: look for intersection point
- Home Run: is it right?

(15, -5)

- Single: substitution
- Double: rewrite one equation so you can plug it in
- Triple: solve for the two variables
- Home Run: is it right?

(15, -5)

- Single: linear combination
- Double: multiply so you can cancel something
- Triple: solve for the two variables
- Home Run: is it right?

$$5x - y = 3$$

$$4x + 3y = 10$$

- Single: choose a method to solve
- Double: set up the equations
- Triple: solve equations
- Home Run: if it's right!

$(1, 2)$

- Single: graphing
- Double: graph them
- Triple: look for intersection point
- Home Run: is it right?

$(1,2)$

- Single: substitution
- Double: rewrite one equation so you can plug it in
- Triple: solve for the two variables
- Home Run: is it right?

(1,2)

- Single: linear combination
- Double: multiply so you can cancel something
- Triple: solve for the two variables
- Home Run: is it right?

$$2x + y = 1$$

$$x - y = 5$$

- Single: choose a method to solve
- Double: set up the equations
- Triple: solve equations
- Home Run: if it's right!

(2, -3)

- Single: graphing
- Double: graph them
- Triple: look for intersection point
- Home Run: is it right?

$(2, -3)$

- Single: substitution
- Double: rewrite one equation so you can plug it in
- Triple: solve for the two variables
- Home Run: is it right?

(2, -3)

- Single: linear combination
- Double: multiply so you can cancel something
- Triple: solve for the two variables
- Home Run: is it right?

$$y = 9 - 3x$$

$$y = 3 + 3x$$

- Single: choose a method to solve
- Double: set up the equations
- Triple: solve equations
- Home Run: if it's right!

$(1,6)$

- Single: graphing
- Double: graph them
- Triple: look for intersection point
- Home Run: is it right?

$(1,6)$

- Single: substitution
- Double: rewrite one equation so you can plug it in
- Triple: solve for the two variables
- Home Run: is it right?

$(-2, -1)$

- Single: linear combination
- Double: multiply so you can cancel something
- Triple: solve for the two variables
- Home Run: is it right?

Farmer's Market
(extra practice, #4)

- Single: choose variables.
- Double: set up the equations
- Triple: solve equations
- Home Run: if it's right!

Farmer's Market
(extra practice, #4)

Miss Porter loves buying fruit at the farmer's market. This week she bought 40 pounds of fruit, containing mango and kiwi. Each pound of mango costs $2, and each pound of kiwi costs $4. She spent $110 on the fruit.

How many pounds of each kind of fruit did Miss Porter buy?

Mango: 25lbs

Kiwi: 15lbs

- Single: M, K
- Double: M+K=40 & 2M+4K=110
- Triple: solve with elimination.
- Home Run: is it right?

Pizza Party
(extra practice, #7)

- Single: choose variables.
- Double: set up the equations
- Triple: solve equations
- Home Run: if it's right!

Pizza Party

(extra practice, #7)

After a week of everyone turning in their homework, Mr. Ames throws a pizza party for his class! He ordered cheese and pepperoni pizzas. Cheese pizza costs $8 while pepperoni costs $10. The total cost for the pizza is $88, and there are 10 pizzas total.

How many of each type of pizza did Mr. Ames order?

Cheese: 6

Pepperoni: 4

- Single: C, P
- Double: 8C+10P=88 & C+P=10
- Triple: solve with elimination.
- Home Run: is it right?

Book Sale
(extra practice, #8)

- Single: choose variables.
- Double: set up the equations
- Triple: solve equations
- Home Run: if it's right!

Book Sale

(extra practice, #8)

Peter is selling his old books to a used book store. He has beginner books for children, picture books, and chapter books. He has 42 books total. The number of beginner books is the same as the number of picture books and chapter books combined. There are twice as many chapter books as picture books.

How many of each type of book does Peter have?

Picture: 7, Chapter: 14, Beginner: 21

- Single: P, B, C
- Double: P+B+C=42 & B=C+P & C=2P
- Triple: solve with elimination.
- Home Run: is it right?

Ice Cream Shop (pg. 14, #10)

- Single: choose variables.
- Double: set up the equations
- Triple: solve equations
- Home Run: if it's right!
- Grand Slam: get the bonus right too!

Ice Cream Shop

(pg. 14, #10)

Anna loves ice cream. At Cream Dream, she can join a monthly club for $7.50, and then each medium cone she gets is only $1.25. At Ice Cream Junction, a medium cone is always $2.75.

How much ice cream must Anna eat in order for the two shops to be the same total price?

* Bonus * If Anna eats 2 medium cones each month, which is the better deal?

5 medium cones

* Ice Cream Junction

- Single: C, M
- Double: C=2.75M & C=1.25M+7.50
- Triple: solve with elimination.
- Home Run: is it right?
- Grand Slam: Ice Cream Junction (only $5.50)

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