Math 1 **6.3 Solving Systems by Elimination (D1)** Unit 3 Day 3

*SWBAT solve a system of equations by using elimination.*

**Solving a System by Adding Equations**

What is the solution of the system? Use elimination. 

|  |  |
| --- | --- |
| **Step 1:** Eliminate one variable | **Step 2:** Substitute the solution for x to solve for the eliminated variable. |
|  |  |
| **Step 3:** Write your solution as a solution set. | |

What is the solution of each system? Use elimination.

1. 
2. 
3. 
4. 

**Solving a System by Multiplying One Equation**

What is the solution of the system? Use elimination. 

|  |  |
| --- | --- |
| **Step 1:** Multiply one equation to eliminate one variable | **Step 2:** Solve for the eliminated variable. Use either of the original equations. |
|  |  |
| **Step 3:** Write your solution as a solution set. | |

What is the solution of the system? Use elimination.

1. 
2. 

**Elimination Special Cases**

What is the solution of the system? Use elimination.

1. 
2. 
3. 

**Solving Word Problems Using Elimination**

*Define two variables to represent your two unknowns. Use elimination to solve.*

1. Find the value of two numbers if their sum is 12 and their difference is 4.
2. The difference of two numbers is 3. Their sum is 13. Find the numbers.
3. Eli’s school is selling tickets to a choral performance. On the first day of ticket sales, the school sold 3 senior citizen tickets and 1 child ticket for a total of $38. The school took in $52 on the second day by selling 3 senior citizen tickets and 2 child tickets. What is the price of one senior citizen ticket and one child ticket?