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| Solving Systems of Equations Word Problems Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 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) The school that Stefan goes to 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. Find the price of a senior citizen ticket and the price of a child ticket. | 4) The state fair is a popular field trip destination. This year the senior class at High School A and the senior class at High School B both planned trips there. The senior class at High School A rented and filled 8 vans and 8 buses with 240 students. High School B rented and filled 4 vans and 1 bus with 54 students. Every van had the same number of students in it as did the buses. Find the number of students in each van and in each bus. |
| 5) Matt and Ming are selling fruit for a school fundraiser. Customers can buy small boxes of oranges and large boxes of oranges. Matt sold 3 small boxes of oranges and 14 large boxes of oranges for a total of $203. Ming sold 11 small boxes of oranges and 11 large boxes of oranges for a total of $220. Find the cost each of one small box of oranges and one large box of oranges. | 6) The length of a rectangle is equal to triple the width. Which system of equations can be used to find the dimensions of the rectangle if the perimeter is 86 centimeters? |
| 7) The price, e, of an entertainment system at Extreme Electronics is $220 less than twice the price, u, of the same system at Ultra Electronics. The difference in price between the system at Extreme Electronics and Ultra Electronics is $175. Which system of linear equations can be used to determine the price of the system at each store? | 8) The perimeter of a rectangular wooden deck is 90 feet. The deck's length, l, is 5 feet less than 4 times its width, w. Which system of linear equations can be used to determine the dimensions, in feet, of the wooden deck? |
| 9) At a restaurant the cost for a breakfast taco and a small glass of milk is $2.10. The cost for 2 tacos and 3 small glasses of milk is $5.15. Which pair of equations can be used to determine the cost of a taco the cost of a small glass of milk? | 10) The talent show committee sold a total of 530 tickets in advance. Student tickets cost $3 each and the adult tickets cost $4 each. If the total receipts were $1740, how many of each type of ticket were sold? |
| 11) The length of a rectangle is 4cm longer than the width. The perimeter is 80 cm. Find the length and the width. | 12) A movie theater charges $5 for an adult’s ticket and $2 for a child’s ticket. One Saturday, the theater sold 785 tickets for $3280. How many of each type of ticket were sold? |