Word Problem Activity

1. Bobby and Edgar are shopping for some new socks. Bobby buys one pair of white socks and 3 pairs of black socks for a total of $22. Edgar buys two pairs of white socks and two pairs of black socks for $20. How much are white socks? How much are black socks?

2. A group of friends went to the mall together and got hungry so they stopped to get some snacks. Joanna and Erica bought snacks for the entire group. Joanna bought three lemonades and five pretzels for $27. Erica bought two lemonades and one pretzel and spent $11. How much is a lemonade? How much is a pretzel?

3. Dom and Chris need to go back to school shopping. Dom buys two packs of pencils and one pack of pens for $18. Chris buys one pack of pencils and one pack of pens for $14. How much is a pack of pens? How much is a pack of pencils?
4. You and your sister are shopping for new shirts for your mom for mother’s day. You buy two shirts and one sweater for $60 and your sister gets one shirt and two sweaters for $75. How much is a shirt and how much is a sweater?

5. At a carnival cotton candy and hot dogs are two different prices. Adam buys one cotton candy and one hot dog for $5. Shannon buys 3 cotton candies and one hot dog for $11. How much is one hot dog? How much is one cotton candy?

6. You are selling shirts to raise money for your favorite school club. Kurt buys one t-shirt and 4 sweatshirts for a total of $45. Renea buys 2 t-shirts and one sweatshirt for $20. How much is a t-shirt? How much is a sweatshirt?
7. The sum of two numbers is 7 and the difference is 3. What are the two numbers?

8. The sum of two numbers is eleven. Two times the first number plus three times the second number is twenty six. What are the two numbers?

9. Mike and Eric want to take guitar and drum lessons. Mike signs up for one guitar lesson and one drum lesson for $25 total. Eric purchases 2 guitar lessons and one drum lesson and spends $35. How much is a drum lesson? How much is a guitar lesson?
10. The difference of two numbers is 7. Two times the first number plus five times the second number is 0. What are the two numbers?

11. Castel and Gabriella are selling pies for a school fundraiser. Customers can buy apple pies and lemon meringue pies. Castel sold six apple pies and one lemon meringue pie for a total of $60. Gabriella sold one apple pie and one lemon meringue pie for a total of $20. What is the cost each of one apple pie and one lemon meringue pie?

12. The school that Lisa goes to is selling tickets to the annual talent show. On the first day of ticket sales the school sold 4 senior citizen tickets and 5 student tickets for a total of $65. The school took in $75 on the second day by selling 7 senior citizen tickets and one student tickets. What is the price each of one senior citizen ticket and one student ticket?
13. Kristin spent $131 on shirts. Fancy shirts cost $28 and plain shirts cost $15. If she bought a total of 7 then how many of each kind did she buy?

14. There are 13 animals in the barn. Some are chickens and some are pigs. There are 40 legs in all. How many of each animal are there?

15. Aiden is a percussionist in his school band. One instrument he plays is in the shape of an equilateral triangle (all sides are equal). One side is \((3x - 2y)\) inches, one is \((8x - 3y)\) inches and the third side is 7. Find x and y.
16. I am thinking of two numbers. The first number minus the second number is 15. One-third of the sum of the numbers is equal to one quarter of the first number. What are the two numbers?

17. On Saturday, $585 was collected from the sale of 55 tickets for a performance. Adult tickets are $12 and student tickets cost 25% less than adult tickets. Find the number of adult tickets and number of student tickets sold on that day.
18. At a fund raising event, a booth was up to sell handmade cards and photo frames. On the first day, 3 cards and 9 frames were sold for $75. The next day, 8 cards and 5 frames were sold for a total of $67. Find the selling price of a card and the selling price of a photo frame.

19. The sum of two numbers is 31. Twice the larger number is 7 more than 3 times the smaller number. What are the numbers?

20. The length of a rectangle is two centimeters more than four times the width. If the perimeter of the rectangle is 84 centimeters, what are the dimensions of the rectangle?
Answer Key:

1. $6 for black socks and $4 for white socks
2. $4 for lemonade and $3 for pretzels
3. $4 for pencils and $10 for pens
4. $15 for a shirt and $30 for a sweater
5. $3 for cotton candy and $2 for a hot dog
6. $5 for a t-shirt and $10 for a sweatshirt
7. The numbers are 5 and 2
8. The numbers are 4 and 7
9. $10 for a guitar lesson and $15 for a drum lesson
10. The numbers are 5 and -2
11. $8 for apple pie and $12 for lemon
12. $10 for senior citizen ticket and $5 for student
13. 2 fancy shirts and 5 plain shirts
14. 7 pigs and 5 chickens
15. $x = -1 and y = -5
16. The numbers are 12 and -3
17. 30 adults and 25 students
18. $4 for a card and $7 for a frame
19. The two numbers are 20 and 11
20. The width is 8 cm and the length is 34 cm