

Name _____



1. Emily is planning a garden in the shape of a square. If each side of the garden measures x meters, and the total area of the garden is 36 square meters, what is the length of each side?
2. Jack is selling tickets to a school event. If he charges \$5 per ticket and sells x tickets, and his total revenue is \$150, how many tickets did he sell?
3. Mia is baking cookies for a party. If she needs x cups of flour, $2x$ cups of sugar, and a total of 10 cups of flour and sugar combined, how many cups of flour does she need?
4. Ethan is building a rectangular swimming pool. If the length of the pool is $x+4$ meters and the width is x meters, and the total area of the pool is 60 square meters, what are the dimensions of the pool?
5. Sophia is decorating her room with picture frames. If she has x frames on one wall and $x+3$ frames on another wall, and she has a total of 20 frames, how many frames does she have on each wall?
6. Lucas is buying notebooks for school. If each notebook costs \$2 and he buys x notebooks, but receives a \$5 discount for buying more than 10 notebooks, how many notebooks did he buy if he paid \$15?
7. Olivia is planning a party and wants to rent a bounce house. The rental company charges a \$50 fee plus \$10 per hour. If Olivia's total cost for x hours of rental is \$130, how many hours did she rent the bounce house?
8. Daniel is a farmer planting rows of vegetables. If he plants x rows of carrots and $x-2$ rows of tomatoes, and he plants a total of 10 rows, how many rows of each vegetable did he plant?
9. Sarah is organizing a bake sale. If she needs x pounds of chocolate chips for cookies and $2x$ pounds of sugar for brownies, and she needs a total of 15 pounds of ingredients, how many pounds of chocolate chips does she need?
10. Noah is renting a bike for a day trip. The rental company charges \$10 per hour plus a \$20 deposit. If Noah's total cost for x hours of rental is \$50, how many hours did he rent the bike for?

