

Variables, Expressions, and Formulas

Name _____

1. The formula that is used to convert Fahrenheit (F) to Celsius (C) is $5 \cdot (F - 32) \div 9$. Convert 77°F to degrees in Celsius.
2. Find the total area of a rectangle tile using the formula lw with the length is $6in$ and a w is $8in$.
3. Ms. Li want to make a rectangular garden. The length of the garden is 8ft and width of the garden is 7ft. Use the formula $2l + 2w$ to find the perimeter of the garden.
4. Charles is 3 years older than Paul. If y represents Paul's age, what expression represents Charles's age? If Paul is 25 years old, how old is Charles?
5. Maya bought some pizzas for \$14 each. If p represents the number of pizzas she bought, what expression shows the total amount she spent? If she bought 5 pizzas how much money did she spend.
6. Mohamed bought several bottles of juice for \$3 each. He paid for all of them with a \$20 bill. If j represents the number of bottles Mohamed bought, what expression represents the change he would receive? If Mohamed bought 4 bottles of juice, how much change would he receive?
7. A giant bamboo plant grew 18 inches per year. When Mrs. Sanchez started measuring the plant it was 5 inches tall. If y represents the number of years she measured the plant, what expression represents its height?
8. Mary earns an allowance of \$5 per week. She also earns \$6 per hour baby-sitting. Write an expression that would represents the total amount of money she earns in one week. If Mary babysits for 6 hours, how much money will she make?
9. One Middle School sold tickets for a school play. The price of an adult ticket was \$5, and the price of a student ticket was \$3. Write an expression that represents the total amount of money collected. Suppose 150 adult tickets and 100 student tickets were sold. How much money was collected?