

Directions: Write an expression for the following scenarios. Be sure to define your variable.

1. A birthday party at a skating rink costs \$45 to reserve a party and 4.50 per guest for skating and skate rental. Write an expression that represents the total cost of the party and define your variable.

2. The student council ordered 1000 pencils embossed with the school name to give to honor roll students and they give each honor roll student two pencils. Write an expression to represent how many pencils will be remaining and define your variable.

3. Caden and four of his friends had a car wash to earn some extra money. They will split the profits, but Caden will get an extra \$18 to repay his parents for the car wash supplies. Write an expression to represent that represents how much Caden will receive and define your variable.

4. Tyler is planning a party at a restaurant. There is a flat fee of \$250 to reserve the restaurant for the evening and a charge of \$20 per person for food. Write an expression to represent the total cost Tyler will pay for his guests and define your variable.

5. A car wash charges \$25 for a thorough inside and outside cleaning of your car. However, they will give you \$0.50 off for each customer you refer to the carwash. Write an expression that represents how much you will pay after referring people to the car wash and define your variable.

6. Five friends are going to a concert, where a ticket costs \$35.00 per person plus a service fee of \$8.00 for purchasing the tickets online. The five friends are going to split the cost evenly. Write an expression that represents how much each friend will have to pay and define your variable.

Directions: Create an expression for the following descriptions. Remember some of our “cautions”:

- **Less than – requires of flip of the terms**
 - Five less than $x \rightarrow x - 5$
- **Times a number VS times the difference/sum of (requires parenthesis)**
 - Three times a number $\rightarrow 3x$
 - Three times the sum of a number and 2 $\rightarrow 3(x + 2)$
- **The quotient of – the word “and” determines what is in the numerator and denominator**
 - The quotient of k decreased by 7 and three $\rightarrow \frac{k-7}{3}$

7. Eight less than a number

8. Seven more than the cube of a number

9. three times the sum of a number and four

10. Two less than five times a number

11. The square of the sum of a number and five

12. A number decreased by four

13. Three more than the quotient of five and x

14. Four more than the product of 2 and y

15. Six less than twice a number

16. Nine times a number decreased by four

17. Four times the difference of x and three

18. Twice the sum of y and three

19. Seven more than twice a number

20. Ten more than the quotient of a number and three

21. One less than the product of four and x

22. Eight times the difference of twelve and a number

23. Six less than the square of a number

24. The square of the sum of a number and one

25. The quotient of three times a number and 10

26. Ten less than one half a number

27. The sum of one third of a number and fourteen

28. One fourth times the difference of a number and three

29. The quotient a number added to four and nine

30. The quotient of twice a number decreased by 6 and 9