

Lesson #5 A: Understanding Algebraic Expressions and Translating Between Words and Algebraic Expressions and Applications (Reference: Lesson #17 in book)**Problem**

1. For each of the following translate the words or statements into algebraic expressions.

1. 9 decreased by some number.

2. The sum of 8 and the product of 3 and some number.

3. The difference between 9 and the quotient of some number and 3.

4. 12 less than 9 times some number.

5. The quotient of 6 times some number and 21.

6. 6 more than the quotient of some number and 12.

7. The product of 5 and the sum of some number and 2.

8. The sum of the product of some number and 2 and the quotient of some number and 6

9. For each of the following translate the algebraic expressions into words or statements.

9. $x + 7$

10. $9 - x$

11. $3x - 4$

12. $\frac{y}{4} - 7$

13. $\frac{13w}{6}$

14. $6(m + 3)$

15. $\frac{2n}{3} + 5$

16. $3x + \frac{x}{4}$

17. For each of the following application problems write an algebraic expression that represents the application problem.

17. Samuel is saving money to buy a car. She has x dollars saved and is saving y dollars per week. Write an algebraic expression to represent the total amount of money she will have saved after 52 weeks.

18. A produce stand sells apples and bananas. Apples cost \$0.20 each and bananas cost \$0.10 each. Write an algebraic expression to represent how much the fruit costs in dollars.