NAME

Module 4 Solving Problems Using Linear

Equations of One Variable

Lesson 1 Translating Sentences into

Algebraic Equations



Set 1

- 1. Translate into an equation: Three more than twice a number is equal to twenty-seven. 2n + 3 = 27
- 2. Translate into an equation: If a number is divided by two, and the quotient is reduced by three, the result is five. $\frac{x}{2} 3 = 5$
- **3.** Translate into an equation: Adding ten to four times a number gives the same result as subtracting eight from seven times that number.

$$4x + 10 = 7x - 8$$

4. Translate into an equation: Eight times the sum of a number and three is forty.

$$8(x + 3) = 40$$

5. Translate into an equation: Twice the quantity of a number minus four is seven more than the number. 2(N-4) = N+7

Set 2

- Translate into an equation: Joe is three times as old as Mack. The difference in their ages is twenty-four years.
 Let A = Mack's age; 3A = Joe's age; 3A A = 24
- 2. Translate into an equation: The length of a side of a square is s, and its perimeter is 8 inches. 4s = 8
- 3. Translate into an equation: Harry is two years older than Larry. The product of their ages is ninety-nine. Let a = Larry's age; a + 2 = Harry's age; a(a + 2) = 99
- **4.** Translate into an equation: The cost of Brenda's food order was c dollars. She paid \$20 and received \$6.24 in change. 20 c = 6.24