
This worksheet will cover the following:

Objective 1: Translations Involving Linear Expressions

Objective 2: Translations Involving Proportions

Objective 1: Translations Involving Linear Expressions

Write an expression representing the unknown quantity.

1. In a math class, the number of students who received an “A” in the class was 5 more than the number of students who received a “B.” If x represents the number of “B” students, write an expression for the number of “A” students.
2. There are 5,682,080 fewer men on Facebook than women. If x represents the number of women using Facebook, write an expression for the number of men using Facebook.
3. There are 10 times as many Facebook users as there are Twitter users. If x represents the number of Twitter users, write an expression for the number of Facebook users.
4. Stacey downloaded twice as many songs as William. If x represents the number of songs downloaded by William, write an expression for the number downloaded by Stacey.
5. Emily made \$20 less than three times Stephen’s weekly salary. If x represents Stephen’s weekly salary, write an expression for Emily’s weekly salary.
6. This year’s senior class has 117 fewer students than last year’s class. If x represents the number of students in last year’s class, write an expression for the number of students in this year’s senior class.

Objective 2: Translations Involving Proportions

Translate the following into equations involving proportions. Do not solve.

7. Toni drives her Honda Civic 132 miles on the highway on 4 gallons of gas. At this rate how many miles can she drive on 9 gallons of gas?

8. Tim takes his pulse for 10 seconds and counts 12 beats. How many beats per minute is this?