

Word Problems from Core Focus Textbook

Define your variable, write the equation that represents the situation and solve.

1. Mike is thinking of two numbers. Their difference is 12. If one of the numbers is 19, what is the other number? Is there only one answer? If not, what is the other possibility for the second number? Explain your reasoning.

2. Julie weighs $5\frac{1}{2}$ times as much as her baby brother, Jeremie. Julie weighs $60\frac{1}{2}$ pounds. How much does Jeremie weigh?

3. The Fahrenheit and Celsius scales are related by the equation $F = \frac{9}{5}C + 32$

A. The lowest temperature in Alaska, -62 degrees Celsius was recorded on January 23rd, 1971 at Prospect Creek Camp. Use the formula to convert the record temperature to Fahrenheit.

B. In February, the average high temperature in Puerto Vallarta, Mexico is 81 degrees Fahrenheit. What is the temperature in degrees Celsius?

4. Barry begins the year with \$25 in his piggy bank. At the end of each month, Barry adds \$3.

A. How much will Barry have after 5 months have passed? Use words and/or numbers to show how you determined your answer. NO EQUATION!

B. Write a formula that could be used to calculate Barry's total savings (S) based on how many months (m) he has deposited money in his bank.

C. Use your formula to determine how many months have passed when Barry reaches \$100 in his account.

5. Mariah's parents got into a car accident. They took their car to the shop to be repaired. When the car finished, they received a bill of \$637. The total cost for parts was \$280 and the cost of labor was \$42 per hour. Determine how many hours the mechanics spent working on the car. Don't forget to define your variable and write the equation that represents the situation.