Solving Problems Involving Factors of Polynomials

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What is the Zero Product Property?

If the product of two factors is zero, then one or both factors must be zero. In symbols, for all real numbers a and b, if ab = 0, then a = 0 or b = 0 or both a and b = 0.

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- 3. Solve the equation.
- 4. Interpret the results.
 - 4.1 Verify if your answer makes sense.

Reminder

A negative number cannot be considered as length, width, or age. So, you need to reject an answer that does not satisfy the conditions stated in each problem.

Sample Problem 1

The length of a rectangular frame is 4 cm more than the width. If the area of the frame is 60 square cm, how long is the frame?

Sample Problem 2

The square of a number is 20 more than 8 times the number. Find the number.

Sample Problem 3

The ages of Rosita and Adelaida are consecutive even integers. Rosita is older than Adelaida. If the sum of the squares of their ages is 340, how old is Rosita?

Thank you for watching.