

Word Bank: Factors, intercepts, rectangle, dimensions, product, sum, zero product property (ZPP), graph

1. What does it mean to factor an expression, for example $x^2 + 5x - 14$? Be specific.
2. Use an area model to factor $10x^2 + 13x - 3$.
3. What is the Zero Product Property? How can you use the ZPP to solve equations like $10x^2 + 13x - 3 = 0$?
4. Solve each equation below. Show your work in your math notebook.
 - a. $(x - 3)(x + 7) = 0$
 - b. $(2x - 5)(x + 3) = 0$
 - c. $x^2 + 5x - 6 = 0$
 - d. $x^2 + 10 = 7x$
 - e. $2x^2 + 11x + 12 = 0$
5. Describe which rectangles have the biggest area (what kinds of fields were the biggest?).