

Algebra Essentials and Applications Internet Activity

ME1 FactorQuad Investigations

1. How does factoring a quadratic equation solve the equation? What is one drawback to this method?

2. What other property is used when solving quadratic equations by factoring?

3. How many solutions does a quadratic equation have? Why?

4. Who were the first people to study quadratics? What approach did Euclid take to studying quadratics?

5. Quadratic equations appear frequently in business. For example, we might model the cost of designing a new car with the equation $f(t) = t^2 - 10t + 50$, where t is time in days and $f(t)$ is cost in thousands of dollars. If we have allocated \$250,000 as initial resources for this design, how much time do we have before we will need to allocate more resources? Why is there only one solution to this problem?
