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**9-17.** Solve the following quadratic equations by factoring and using the Zero Product Property. Be sure to check your solutions.

c. 2*x*2 − 10*x* = 0 d. 4*x*2 + 8*x* − 60 = 0

**9-19.** Does a quadratic equation always have two solutions? That is, does a parabola always intersect the *x*-axis twice?

* 1. If possible, draw an example of a parabola that only intersects the *x*-axis once.
  2. What does it mean if the quadratic equation has no solution?  Draw a possible parabola that would cause this to happen.

**9-20.** Find the equation of the line through the point (−2, 8) with slope 1/2.

**9-22.** The increased demand for vegetarian meals has caused an increase in the price of tofu.  If the current cost of $2.99 per pound is increasing 6% per year, what will it cost in 5 years?

**9-23.** Decide if the statements below are true or false. If necessary, review the descriptions for the inequality symbols  <, <, >, and > in the Lesson 9.2.1 Math Notes box.

1. 11 < −13
2. 5 (2)  > 10
3. 13 > −3(2 − 6)
4. 4 < 4
5. 9 > −9
6. −2 > −2
7. −16 < −15
8. 0 > 6