### Lesson 13 Practice Problems

1. Add the number that would make the expression a perfect square. Next, write an equivalent expression in factored form.
2. Noah is solving the equation . He begins by rewriting the expression on the left in factored form and writes . He does not know what to do next.

* Noah knows that the solutions are and , but is not sure how to get to these values from his equation.
* Solve the original equation by completing the square.

1. An equation and its solutions are given. Explain or show how to solve the equation by completing the square.
   1. . The solutions are and .
   2. . The solutions are and .
   3. . The solutions are and .
2. Solve each equation.
3. Match each quadratic expression given in factored form with an equivalent expression in standard form. One expression in standard form has no match.

* (From Unit 7, Lesson 8.)

1. Four students solved the equation . Their work is shown here. Only one student solved it correctly.

* Student A:
* Student B:
* Student C:
* Student D:
* Determine which student solved the equation correctly. For each of the incorrect solutions, explain the mistake.
* (From Unit 7, Lesson 9.)



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