## Unit 3 Lesson 16: Solving Quadratics

### 1 Find the Perfect Squares (Warm up)

#### Student Task Statement

The expression is equivalent to . Which expressions are equivalent to for some number ?

### 2 Different Ways to Solve It (Optional)

#### Student Task Statement

Elena and Han solved the equation  in different ways.

Elena said, “First I added 2 to each side:

So that tells me:

I can find the square roots of both sides:

Which is the same as:

So the two solutions are and .”

Han said, “I used the quadratic formula:

Since , that means , , and . I know:

or

So:

I think the solutions are and .”

Do you agree with either of them? Explain your reasoning.

### 3 Solve These Ones (Optional)

#### Student Task Statement

Solve each quadratic equation with the method of your choice. Be prepared to compare your approach with a partner‘s.



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