## Unit 7 Lesson 6: Rewriting Quadratic Expressions in Factored Form (Part 1)

### 1 Puzzles of Rectangles (Warm up)

#### Student Task Statement

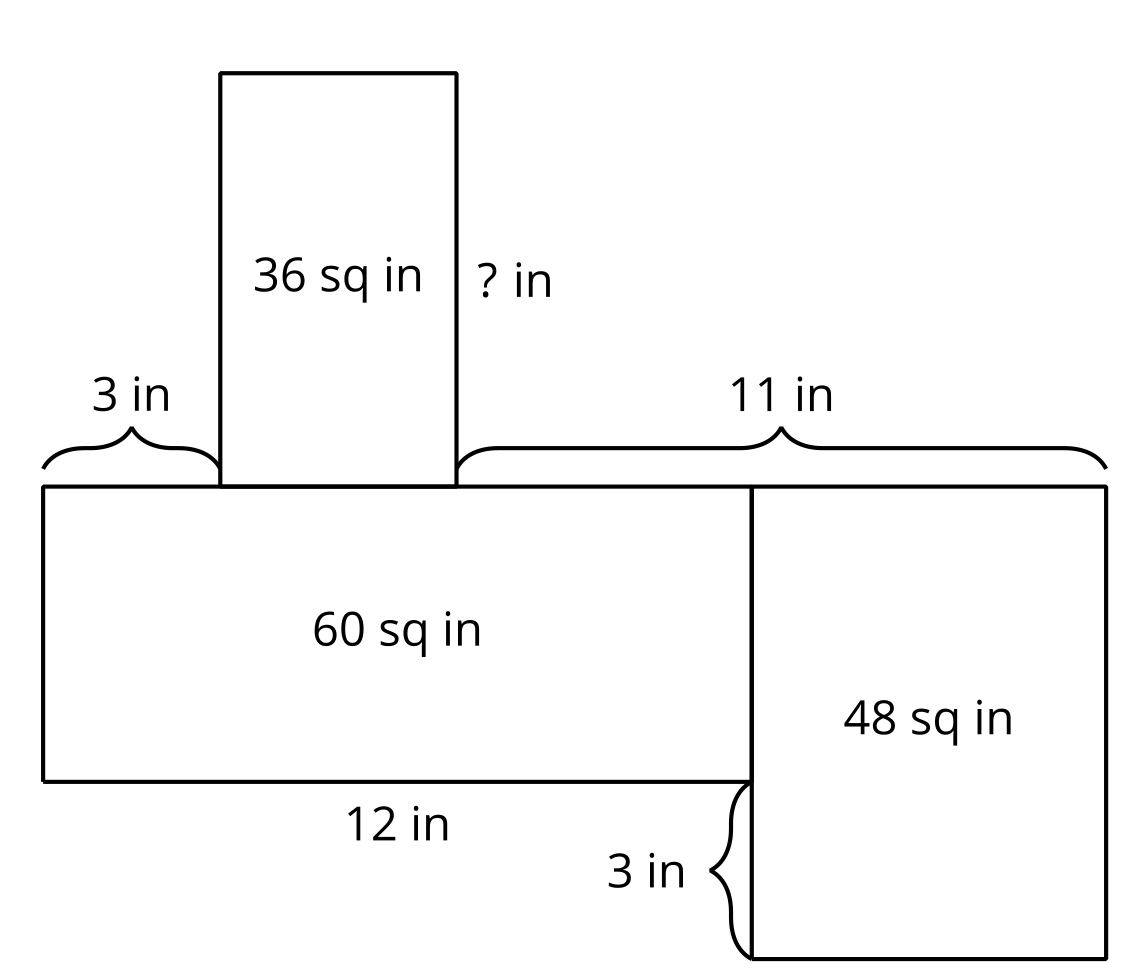
Here are two puzzles that involve side lengths and areas of rectangles. Can you find the missing area in Figure A and the missing length in Figure B? Be prepared to explain your reasoning.

Figure A



​​​​​​

Figure B



### 2 Using Diagrams to Understand Equivalent Expressions

#### Student Task Statement

1. Use a diagram to show that each pair of expressions is equivalent.

* and
* and
* and
* and
* and
* and

1. Observe the pairs of expressions that involve the product of two sums or two differences. How is each expression in factored form related to the equivalent expression in standard form?

### 3 Let’s Rewrite Some Expressions!

#### Student Task Statement

Each row in the table contains a pair of equivalent expressions.

Complete the table with the missing expressions. If you get stuck, consider drawing a diagram.

| factored form | standard form |
| --- | --- |
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