



# Generic Rectangles II

## Opening Question:

What does it mean to find **factors**?

With a given **area/product**, the **factors** are \_\_\_\_\_

\_\_\_\_\_.

## Review of Factoring Trinomials

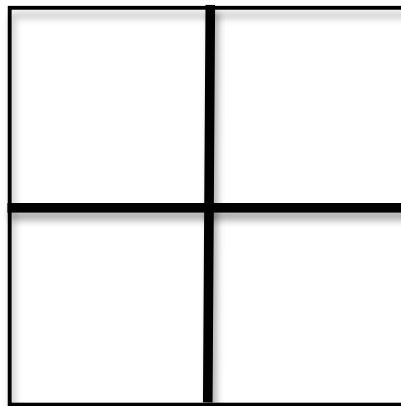
ex.  $3x^2 + 10x + 3$

**Recall Standard Form:**  $ax^2 + bx + c$

1. Which two boxes will you be able to fill in right away? \_\_\_\_\_

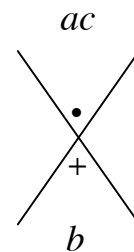
Fill in those terms first.

2. For which two boxes will you need to do something to know which numbers to use? \_\_\_\_\_

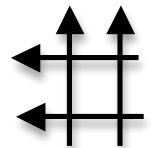


3. Use an X Problem to know how to divide the  $x$ 's.

4. Fill in the two  $x$ -terms on your rectangle.



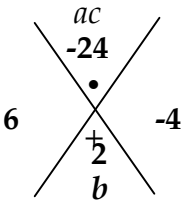
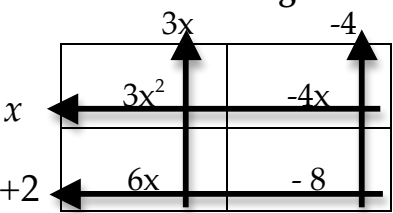
5. Factor out the **Greatest Common Factor** for each ROW and COLUMN.

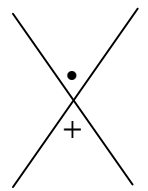
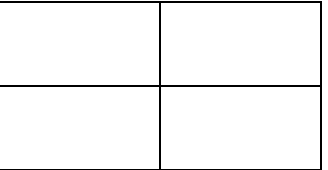


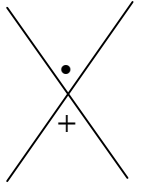
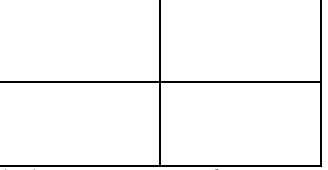
6. Record your factors as a multiplication sentence:

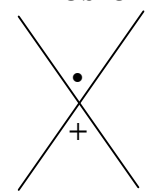
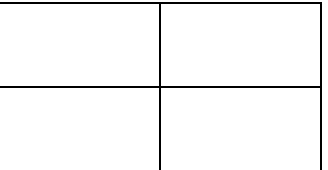
$$3x^2 + 10x + 3 =$$

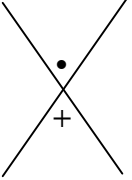
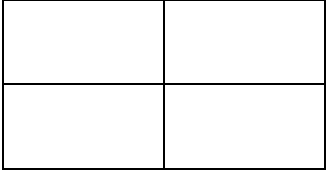
## Practice Time!!

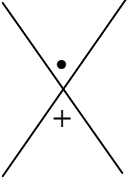
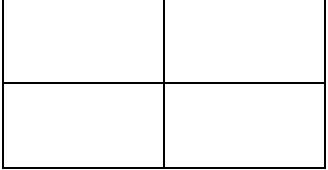
X-Problem	Generic Rectangle	Factored Form
 <p>Example: <math>3x^2 + 2x - 8</math></p>	 <p>Find the common factors in each row and column.</p>	$(3x - 4)(x + 2)$

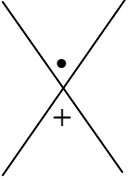
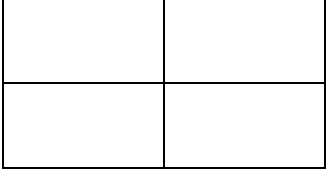
X-Problem	Generic Rectangle	Factored Form
 <p>1. <math>16x^2 + 10x + 1</math></p>	 <p>Find the common factors in each row and column.</p>	

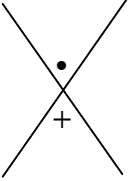
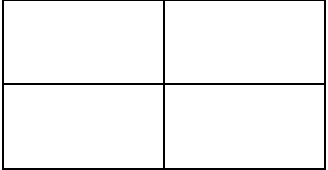
X-Problem	Generic Rectangle	Factored Form
 <p>2. <math>2x^2 + 14x + 20</math></p>	 <p>Find the common factors in each row and column.</p>	

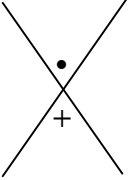
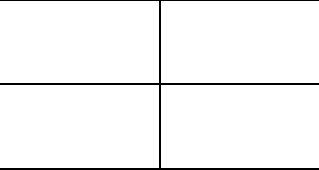
X-Problem	Generic Rectangle	Factored Form
 <p>3. <math>6x^2 - 11x - 2</math></p>	 <p>Find the common factors in each row and column.</p>	

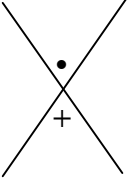
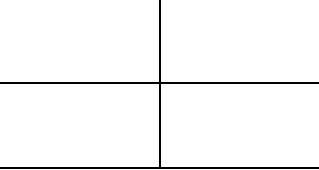
X-Problem	Generic Rectangle	Factored Form
 <p data-bbox="272 472 500 514">4. <math>6x^2 - 29x - 5</math></p>	 <p data-bbox="630 472 995 527">Find the common factors in each row and column.</p>	

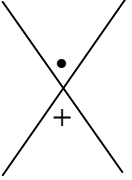
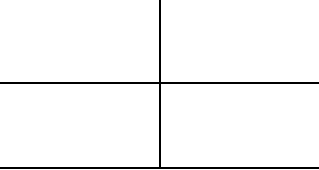
X-Problem	Generic Rectangle	Factored Form
 <p data-bbox="272 861 500 903">5. <math>2x^2 - 7x - 15</math></p>	 <p data-bbox="630 861 995 915">Find the common factors in each row and column.</p>	

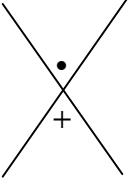
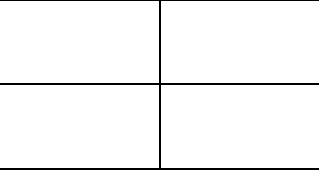
X-Problem	Generic Rectangle	Factored Form
 <p data-bbox="300 1249 479 1291">6. <math>x^2 - x - 6</math></p>	 <p data-bbox="630 1249 995 1306">Find the common factors in each row and column.</p>	

X-Problem	Generic Rectangle	Factored Form
 <p data-bbox="284 1638 495 1680">7. <math>x^2 - 6x + 5</math></p>	 <p data-bbox="630 1638 995 1692">Find the common factors in each row and column.</p>	

X-Problem	Generic Rectangle	Factored Form
 <p data-bbox="292 472 479 514">8. <math>x^2 - 4x - 5</math></p>	 <p data-bbox="630 472 993 527">Find the common factors in each row and column.</p>	

X-Problem	Generic Rectangle	Factored Form
 <p data-bbox="259 861 511 903">9. <math>12x^2 - 11x + 2</math></p>	 <p data-bbox="630 861 993 915">Find the common factors in each row and column.</p>	

X-Problem	Generic Rectangle	Factored Form
 <p data-bbox="259 1249 511 1291">10. <math>16x^2 - 30x - 4</math></p>	 <p data-bbox="630 1249 993 1306">Find the common factors in each row and column.</p>	

X-Problem	Generic Rectangle	Factored Form
 <p data-bbox="251 1638 519 1680">11. <math>25x^2 - 20x + 4</math></p>	 <p data-bbox="630 1638 993 1692">Find the common factors in each row and column.</p>	