

## Factor Solve and Check Quadratics



Name: \_\_\_\_\_ Date: \_\_\_\_\_

Use the material to work through each task. Show the requested response.

A factor can be zero

$x^2 - 5x + 6$  factors as  $(x - 2)(x - 3)$ . If the product is zero,  $x$  can be 2 or 3.

1. Factor  $x^2 - 7x + 12$ .

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2. Solve  $x^2 - 7x + 12 = 0$ .

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3. Solve  $x^2 - 9 = 0$ .

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4. Check  $x = 2$  in  $x^2 - 5x + 6 = 0$ .

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5. A rectangle has sides  $x$  and  $x + 1$  and area 12. Find its positive side lengths.

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6. Why cannot you set each factor to zero when  $(x - 2)(x - 3) = 6$ ?

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