**Unit 7: Factoring**

**Lesson 2: Factoring a trinomial with a leading coefficient =1**

Objectives:

* I can factor a trinomial with a leading coefficient =1
* I understand the connection between the sum and product of the numbers in the factors and the quadratic trinomial.
* I can factor a trinomial with a leading coefficient =1 to solve real-life applications.

Agenda:

* Video 7-2
* Practice
* Application
* Quick Check

Focus Questions:

* How can you factor a quadratic with a leading coefficient of 1 using guess and check?
* What is the connection between the sum and product of the numbers in the factors and the quadratic trinomial?

Vocabulary: Trinomial, Factors

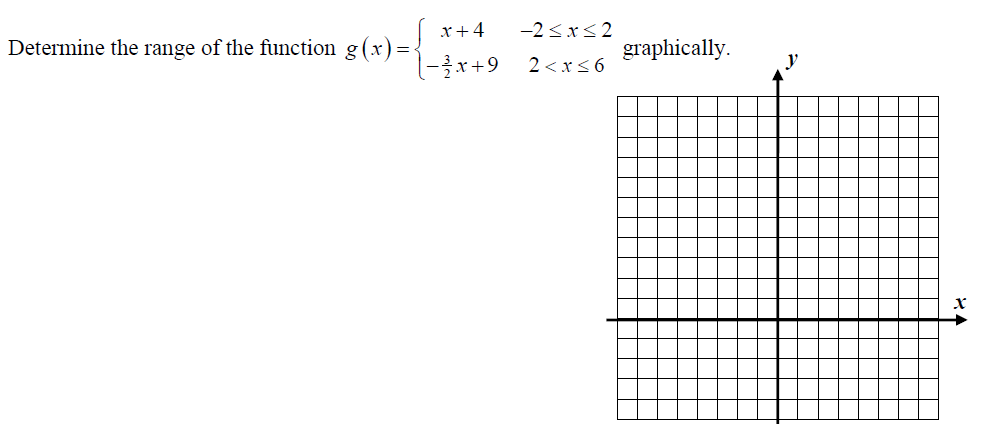
Homework: HW 7-2

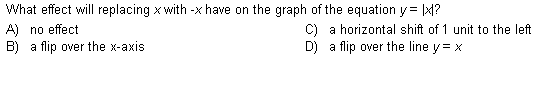
Web support:

* <https://www.khanacademy.org/math/algebra/polynomial-factorization/factoring-quadratics-1/v/factoring-polynomials-1>
* <https://www.youtube.com/watch?v=NwrmX6c_JhQ>

Study for the midterm there are no do overs

**Do Now: Looking back**

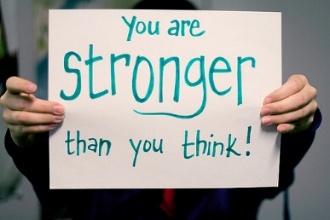
1. 



1. **Use the distributive property and leave your answers in standard form.**
2. 2.

**Factor using the two types you learned about from last class.**

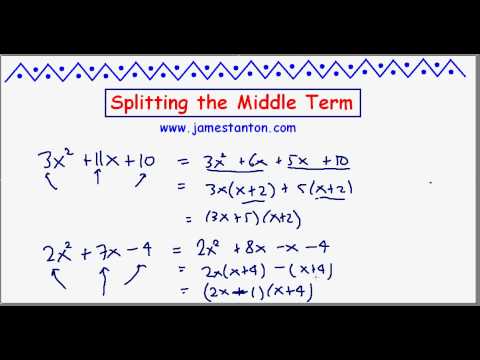
1. 2. 3.

[](https://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=2ahUKEwi4i-u5h6jZAhXBg-AKHeq2BNcQjRx6BAgAEAY&url=https://opegreat.wordpress.com/2015/05/21/increase-your-strenght/&psig=AOvVaw0GG2DNSNQLybeTA8T52BIV&ust=1518788808338763)4.5.6.

7.8.9.

*Notes:*

***To factor a trinomial****in the form x2 + bx + c, find* ***two integers*** *whose* ***product is****c and whose* ***sum is b.*** *... For example, to factor x2 + 7x +10, you are looking for two numbers whose sum is 7 (the coefficient of the middle term) and whose product is 10 (the last term).*



**Notes: 7-2: Trinomials Play the video first: AC Method or split the middle.**

**Factor Trinomials with standard form of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

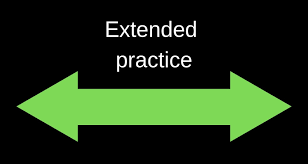
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| --- | --- |
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|  |  |

**Your Turn:**

|  |  |
| --- | --- |
|  |  |

**Factor Completely: Sometime you might have to factor twice.**

|  |  |
| --- | --- |
|  | 2. |

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

**Homework 7-2: Factoring Day 2.**

1. Which of the following products is equivalent to the trinomial ?
2. (3)
3. (4)

Factoring Using AC Method (Split the middle)

|  |  |
| --- | --- |
| 2. | 3. |
|  |  |

Mixed problems: Please refer to the Do now or last lesson.

6.7.

The following might require you to factor twice: Check using the graphing calculator.

|  |  |
| --- | --- |
| 8. | 9. |
| 10 |  |
|  |  |

**14 Word Problems:** The length of a rectangle is represented by and the width is represented by .

Express the area of the rectangle as a binomial in terms of x.