

NEW YORK TIMES BESTSELLER

THE BOOK THAT INSPIRED THE FILM

THE AMERICAN DREAM  
AND THE UNTOLD STORY OF  
THE BLACK WOMEN MATHEMATICIANS  
WHO HELPED WIN THE SPACE RACE

# HIDDEN FIGURES



MARGOT LEE SHETTERLY

Book on your desk.  
Begin reading.

Read in your novels.



# Announcements

I really want to give back your Exponents Test 2, but I still have two students who have not taken it yet...

I will give your Polynomials test back *ASAP* as well, a few students were absent yesterday.

HF Chapters 9-12 are due on Monday. Make sure you are hitting submit on Google Classroom!

# Hidden Figures Due Dates

- 9-12 due March 4
- 13-16 due March 11
- 17-20 due March 18
- 21-23 due March 25 → Book completed!

When we have finished the novel,  
we will watch the movie!



# Unit Map - Factoring

Friday - Factoring by Grouping

Monday - Factoring Trinomials  $x^2+bx+c$

Tuesday - Factoring Trinomials  $ax^2+bx+c$

Wednesday - Factoring Special Cases

Thursday - *Hidden Figures Day - Ms. Barger at Math 1 PD*

Friday - Factoring Review

**Monday - Factoring Test**

# Warm-Up

1. What is the GCF of 35 and 20
2. What is the GCF of 7, 15, and 21
3. Factor:  $3x^2-6x+9$
4. Name two numbers that multiply to be 24 and add to be -11
5. Name two numbers that multiply to be -44 and add to be 7

# Factoring by Grouping

3/1/2019

# Remember...

To find the GCF or ( ), we have to:

1. See what they ALL have in common (including numbers and variables)
2. Remove what is in common
3. Show what is left
4. Check by redistributing what you removed!

**Directions:** Find the GCF in each of the following.

1.  $2x^2 - 10x$

2.  $8x^2y^5 + 4x^5y^3 + 12x^3y^3$

3.  $24x^5y^2 + 16x^7y^3 + 40x^3y^2$



# Quick Review of Factoring

4.  $4x^8y^4 + 2x^3y^3 + 12x^5y^6$

5.  $27x^6y^7 + 81x^2y^3 + 18x^3y^4$

6.  $3x^3 + 12x^2 + 9x$

7.  $8x - 56x^3$

8.  $4a^4b - 16a^2b^2 + 4ab^4$

9.  $6a^3b^2 - 12a^2b^3 + 18ab$

$$\underline{x^3 - 2x^2 + 4}$$

$$x^2 ($$

Math 1

# Factor By Grouping

**Factor by Grouping:** A way of factoring a polynomial with \_\_\_\_\_ terms!

**Essential Understanding:** polynomials of a degree greater than 2 can be factored

Math 1

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**IF THERE IS A GCF, YOUR FIRST STEP IS ALWAYS TO  
PULL IT OUT**

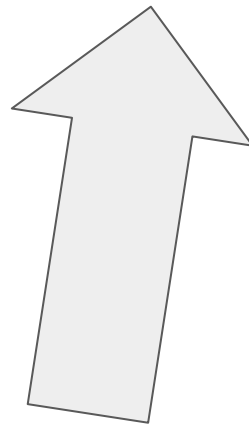
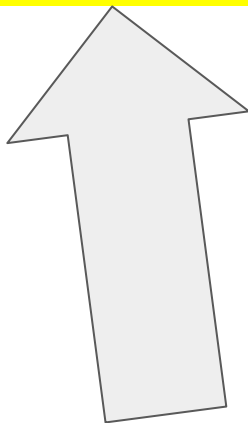
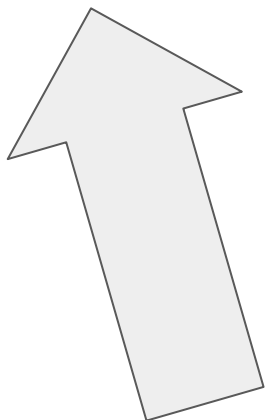
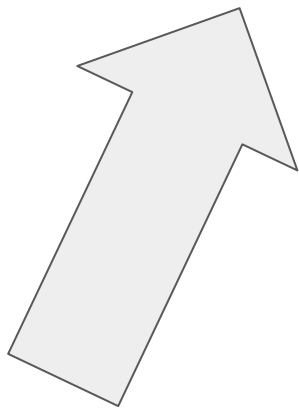
Math 1

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**Factor by Grouping:** A way of factoring a polynomial with \_\_\_\_\_ terms!

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**Example 1:** Factor  $3n^3 - 12n^2 + 2n - 8$

**GCF Method**

**Step 1:** Put parenthesis around first two terms and second two terms.

**Step 2:** Factor out a GCF if one exists from each group

**Step 3:** Write your new factors as binomials

**Step 4:** Check your factors by multiplying them together and getting the original problem.

**Example 2:** Factor  $8t^3 + 14t^2 + 20t + 35$

**Example 3:** Factor  $12x^3 + 3x^2 + 20x + 5$



**Got it?** Factor each of the following by grouping.

1.  $21x^3 - 28x^2 - 6x + 8$

2.  $8t^3 + 36t^2 + 2t + 9$

3.  $6x^3 + 9x^2 + 2x + 3$

4.  $21x^3 + 6x^2 - 28x - 8$

5.  $32m^3 + 72m^2 - 80m - 180$

6.  $30b^4 - 45b^3 - 10b^2 + 15b$

7.  $60a^5 - 72a^4 - 210a^3 + 252a^2$

8.  $12e^4 + 18e^3 + 36e^2 + 54e$

# IXL Practice - 10 Questions

<https://www.ixl.com/math/algebra-1/factor-by-grouping>

[www.yellkey.com/remember](http://www.yellkey.com/remember)

# Homework

Textbook page 519 #16-21, 23, 25, 43

HF through Chapter 12 due Monday