Entering Grade 8 Summer Work

Entering Grade 8 Summer Reading Assignments
❏ You will read at least FOUR books this summer.

Where to find Reading List Books
❏ Boston Public Library https://www.bpl.org/online-resources/ ❏ Access TumbleBooks https://www.tumblebooks.com/ ❏ At the end of this packet

Summer Reading Assignments:

#1 Letter to Your Teacher

You will write a letter to your new teacher about what you thought and felt while reading a book of your choice.
- ❏ Letters can be handwritten or typed.
- ❏ Letters should be in standard friendly letter format
- ❏ Letters should be at least 3 paragraphs (5-6 sentences per. paragraph)
- ❏ Letters will be your first Quiz grades of your 7th grade year!

#2 Answer the Choice book questions for one of the choice books you read.
- ❏ 1. List at least five important events and give a brief explanation of why each is important to the book.
- ❏ 2. What is the central conflict or major problem that characters/people face in the book? How is it resolved?
- ❏ 3. Discuss one choice one of the main characters or people made in the book. How did this choice change that character/person? How did it affect the story as a whole?
- ❏ 4. Choose a character or person from the book, pick a quality that describes him/her, and write one brief paragraph that includes an example of an event from the book that illustrates this quality.
- ❏ 5. Write a brief paragraph describing something you learned from the book. In other words, how did the author make you think; what is one idea, theme, or issue that you considered?
- ❏ 6. What is the moral of the story or what is the book trying to teach its readers?

Entering Grade 8 Summer Reading Assignments Continued

Summer Reading Assignments:

#3 Book Commercial

- ❏ You are going to recommend a book to your peers and the greater school community.
- ❏ Part 1: Written Element
  - ❏ Write out a draft or script to use as the narration of your book commercial, including the following in your book commercial:

    FICTIONAL TITLES
    1. Title, author, and genre of book.
    2. Summary of plot, characters, and theme (explain the main conflict, but don't give away the ending—you want people to read it!).
    3. Opinion and/or recommendation for the book and why did you pick this book?
    4. Which character did you find the most interesting OR the most relatable?
    5. One thing you learned from the book that you would like to share with your audience.
    6. Persuade your audience (primarily other middle school students) to read the book.

    NONFICTION TITLES
    1. Title, author, and subject area of the book.
    2. Five interesting things you learned from the book
    3. A brief (30 second) biography of one of the main people in your book, and what was particularly interesting about him/her. Also, 3 questions you would love to ask this person about his/her life.
    4. Persuade your audience (primarily other middle school students) to read the book.

- ❏ Part 2: Pictures
  - ❏ Select pictures or draw pictures that you feel help portray the story's elements and characters; make a folder in your book commercial folder to save these. Find usable (royalty free) pictures on the internet.

Dear SJP2CA Grade 8 Families,

Here is your summer packet for math learning! We hope you will use these resources to help your student continue building and strengthening math skills until we see them again in September.

In this packet you will find:

o An overview of the goals and expectations for Middle School Math, as well as specifics about each grade level.

o An overview of what your student learned in Grade 7 and what skills will help them be successful when they return, as well as new skills they can explore if they're ready for a challenge

o Daily practice to help keep their math skills fresh; these daily problems are a review of concepts we learned over the last year, and a few new skills for them to explore. Students should do a little work each week if they can, and the skills practice is set up as a daily calendar.

o Links to selected online math resources for digital practice, along with optional summer math challenges to stretch their thinking, including a choice board and some math-focused books

If you have questions or you need help with any of these resources, please reach out to your campus principal or vice principal, or to our math coach.
We're happy to assist and to make suggestions!

Saint John Paul II
Summer Packet – Entering Grade 8

Middle School Math Overview

Highlights and Major Work
Grade 6: Ratios and proportional relationships; early expressions and equations
Grade 7: Ratios and proportional relationships; arithmetic of rational numbers
Grade 8: Linear algebra and linear function

Required Fluencies Overview
Required fluencies are critical skills students need to be successful at a given grade level for each grade. **Fluency** means students have
Flexibility - they understand relationships between numbers and concepts
Accuracy - they are able to find the correct solution
Efficiency - they know multiple ways to solve a problem and choose the one that works best; efficiency is NOT just speed
Appropriate (strategy choice) - they know which strategy to use, instead of just choosing the most familiar strategy

K-5 students should have mastered **fact fluency**-- understanding the relationships between numbers and the operations we use for computation; middle school students will shift to **procedural fluency**-- using and applying these facts, algorithms and strategies more deeply and in novel situations. The daily fact practice in the summer packet will expose students to content across multiple standards to help build their fluency; the additional resources being shared with families provide more games, activities, and books to help build fluency skills in the areas below.

Required Fact Fluencies from Grades 4-6
Incoming middle school students who still need practice on FACT FLUENCY for the 4 operations are strongly encouraged to practice these skills.
- Add/subtract within 1000
- Add/subtract within 1,000,000
- Multi-digit multiplication
- Multi-digit division
- Multi-digit decimal operations

Grade 7 Skills Practice

By the end of Grade 7, students should successfully be able to do the following; these are great skills to practice over the summer

- Analyze proportional relationships and use them to solve real-world and mathematical problems.
- Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide
- rational numbers.
- Use properties of operations to generate equivalent expressions.
- Solve real-life and mathematical problems using numerical and algebraic expressions and equations.

Explore Grade 8 Fluencies

Students ready for a challenge should continue practicing their fluency from previous years; good options are to use the problems from *Open Middle Math*, which is linked in the online resources.

Online Resources

For more summer learning resources, please visit the Math Coach's Corner at SJP2CA here

https://sites.google.com/sjp2ca.org/mathcoachscorneratsjp

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Monday	Tuesday	Wednesday	Thursday	Friday
Evaluate each expression for n=2, m=3, and t=5 3t – 4n = 13- (m+n) = 4.7 + mt = **Compare. Write <, =, or >** -7 ___7 32 ___(-32) (-9) ___-3 (-8)___ (-6)	**Simplify each expression** -6 + 4 = 15 – (-8)= -4 + (-5) = **Solve each equation** X – 6 = -15 1.5 = m – 3.2 -12 = m + 8	**Read and complete…** A teacher asks 15 students to estimate an answer to a question. The answers are 1, 5, 5, 6, 7, 8, 10, 12. The correct estimate is 7. The teacher wants to calculate how far off the estimates were by finding the absolute value of the difference between each estimate and the answer. Which estimate was off by the most? Drew sold lemonade and apples at the school fair. He sold a total of $64. If he sold $21 in lemonade, how many dollars worth of apples did he sell?	**Use the Distributive Property to find each total cost.** 3 loaves of bread at $1.99 each 4 bags of berries at $1.98 each 6 cans of tuna at $.97 each 5 boxes of rice at $2.95	**Write and solve an equation for each situation.** Nina buys lunch for herself and her sister. She pays $7.50. Nina has $5.25 left over. How much money did she begin with? A group of twelve volunteers raises $144 for three charities. Each charity gets the same amount. How much does each charity get?

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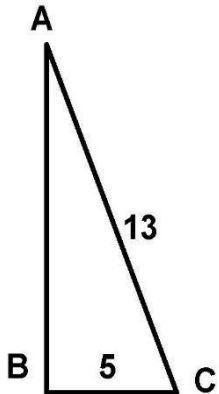| Monday	Tuesday	Wednesday	Thursday	Friday
Find the GCF of each pair of numbers using prime factorization. 9, 33 22, 121 7, 15 17, 51 6, 24	**Write each fraction in simplest form.** 20/25 -9/42 7/77 36/63 40/48	**Write each decimal as a mixed number or fraction in simplest form.** 0.45 12.2 8.6	**Convert each improper fraction into a mixed number** $\dfrac{18}{7}$ $\dfrac{27}{8}$ $\dfrac{100}{7}$	**Word Problems** Two frogs hop around a circular track that is 60 inches around. First the larger frog jumps 13 in. and then the smaller frog jumps 11 in. If they take turns jumping, how many inches from the start will they be when they once again are at the same point?

Monday	Tuesday	Wednesday	Thursday	Friday
Word problems Each week, Joey gets paid $10 plus $2 for each chore that he does. His sister Julie gets paid $5 plus $3 per chore Write an expression for how much their parents pay Joey and Julie each week if they do the same amount of chores If Joey and Julie do 5 chores, how much do they get paid individually? How much do their Parents pay all together?	**Complete** $7(6 + y) = (\_ \times 6) + (7 \times \_)$ $(3 \times z) + (\_ \times 4) = 3(\_ + \_)$ **Multiply each expression** $12(2 + 3x)$ $5(x - 5)$ $2(6x + 5)$ $10(x - 6)$	**Solve** $3a < 15$ $b + 12 \leq 19$ $15 > 3y$ $x + 6 < 9$	**Suppose you toss a coin twice. Find each probability.** P (no heads) P (exactly one head) P (at least one head)	**Write the decimal as a percent** 0.46 0.37 0.17 8.10 0.3

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Monday	Tuesday	Wednesday	Thursday	Friday
Solve each equation $6n + 3 = 21$ $-10 = 2 + 6w$ $5d + 10 = 25$ $7g + 3 = 10$	**Define the following terms;** Exponent: Equivalent Fractions: Parallelogram: Common factor:	**Define the following terms;** Congruent: Area: Bar graph: Average:	**Define the following terms;** Radius: Expression: Factor: Formula:	**Define the following terms;** Divisor: Degree: Median: Mass:

Monday	Tuesday	Wednesday	Thursday	Friday
What is the value of $(5 + 3)^2 + (5 - 3)^2$? ○ 68 ○ 70 ○ 72 ○ 77 What is the value of the expression: $2^2 - 3^2 + 4^2$ ○ 6 ○ 8 ○ 11 ○ 14 ◉ Which group does not contain equivalent fractions, decimals and percents? ○ 10%, 1/10, 0.1 ○ 40%, 2/5, 0.4 ○ 50%, 1/2, 0.5 ○ 25%, 1/4, 0.2 ◉	Question 4: If it takes a company 4 hours to build 1,300 cell phones, at the same rate it will take the company _____ Hours to build 39,000 cell phones. The right triangle in the figure below has AC = 13 and BC = 5. What is the length of side AB? ○ 17 ○ 9 ○ 12 ○ 10	**Find each sum or difference.** -8 + 13 = -77 + (-46) = 50 – 82 = 11 + (-19) = 12 – 34 =	**Complete ….** 5 x 5 = 7x 9 = 9x 7 = 10 x 14 = 22 x 20 = 25 x8 = 66 x 9 = 33 x 6 = 74 x 34 = 17 x 8 = 11 x 5 =	**Complete ….** 48 x 5 = 38 x 9 = 69 x 7 = 15 x 14 = 333 x 20 = 587 x 22 = 784 x 9 = 31 x 9 = 774 x 3 = 521 x 8 = 369 x 5 =

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Use the percent proportion to find each number. 50 % of what number is 31? What number is 110% of 51? Find 8% of 95.	**Find each product or quotient. Write in simplest form.** 2/5 x 5/9 = 7/8 x 2 = 4/5 x 1/5 =	**Find the area for base *b* and height *h* of each triangle** b = 4 in h = 6 in b = 4 cm h = 5 cm b = 2.5 ft h = 6.2 ft	**Our coin is randomly selected from a jar containing 20 pennies, 15 nickels, 3 dimes, and 12 quarters. Find the odds of each outcome. Write in simplest form.** A dime A value less than $0.25 A value greater than $0.10 A value less than $0.03	**Find the mean, median and the mode for each set of data.** (99, 88, 88, 92, 100) (30, 22, 38, 41, 33, 41, 30, 24)

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Monday	Tuesday	Wednesday	Thursday	Friday
Evaluate each expression. 35 – 3 + 8 = 29 – 3 (9 – 4)=	**Write a verbal expression for each algebraic expression.** 14 – 9 C	**Find the value of each expression.** 5.65 – 3.08 = 1 1/12 + 3 2/3 = 4.85 (2.72) =	**Name the property used in each step.** 2 x 3 + (4 x 2 – 8) = 2 x 3 + (8 -8) _____ = 2 x 3 + (0) _____ = 6 + 0 _____	Complete …. 648 x 15 = 398 x 29 = 369 x 7 = 1551 x 14 =

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Find the value of x. Then name the property used. 8 = 8 + x 10x = 10 X + 0 = 5 5 + 1/5 = x	Define….. Line: Integers: Interval: Liter:	**Properties and Operations** Applying Properties Write the sum. Change the order of the addends. 2 + 5 = ____ + _____=_____ Using inverse operations Find the number that makes both sentences true. _____ x 6 = 42 Equations and Expressions Finding Missing Numbers 7 + 5 = 9 + _____ Solve Equations m + 41 = 95	Complete….. 432 x 6 = 657 x 14 = 951 x 2 = 258 x 12 = 352 x 9 = 32 x 8 =	Complete….. 123 x 7 = 914 x 14 = 224 x 20 = 652 x 32 = 78 x 8 = 33 x 5 =

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Monday	Tuesday	Wednesday	Thursday	Friday

Simplify
 	
$2^3 \times 2 - 4^2$
 	
$(3 - 2)^2 - 2^2$
 	
$2^2 \times (2 - 4)^2$
 	
$4^3 + 4 \div 4$
	Write an algebraic expression for each word phrase.
	
	13 less than a number q
	
	Number of day in w weeks
		Match each word phrase with an expression.
		
		There are two fewer guests.
		
		_____
		
		There are half as many ears. ____
		
		There are two more books. _____
		a. m + 2 **b.** n divided by 2
		c. p - 2
			Write <, > , or =
			
			(-12) ____ (12)
			
			(-19) ____ (-7)
			
			(3) ____ (-4)
			
			(6) ____ (-9)
				Multiple Choice…..
				Which integer is greater than -6 and less than -3?
				  A. 4
				  B. -2
				  C. -5
				  D. -7
				Kyle's family drove 40.8 miles east to visit his grandmother, and then 5.2 miles farther east to a restaurant. His family then drove west to return home. How many miles did his family travel in all?
				  A. 46 C. 86.8
				  B. 81.6 D. 92

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Monday	Tuesday	Wednesday	Thursday	Friday
Solve each equation $3x - 1 = 14$ $10 + 3n = 25$ $\frac{2}{3}n - 10 = 14$ $1.5 \quad \frac{4}{5} + a = 21$	**Complete…..** $662 \times 6 =$ $314 \times 4 =$ $523 \times 2 =$ $256 \times 5 =$ $111 \times 7 =$ $374 \times 9 =$	**Complete…..** $987 \times 5 =$ $654 \times 14 =$ $369 \times 2 =$ $258 \times 12 =$ $147 \times 9 =$ $369 \times 8 =$	**Open – ended….** Write an integer that is greater than 10 and less than (-15).	**Writing in Math…..** Suppose *a* and *b* are integers, and (a) > (b). Must *a* be greater than *b*? Use examples to support your answer. _____ _____ _____ _____ _____ _____ _____

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Describe the pattern for each sequence. Then find the next three terms 1, 2, 4, 8, __, __, __ $\frac{1}{2}, \frac{1}{4}, \frac{1}{8}, \frac{1}{16}$, __, __, __ -2, 4, -8, -16, __, __, __ 600, -300, 150, __, __, __	**Number Sense….** Which is greater. -5 (x) or 5 (-x)?	**Write an algebraic expression for each phrase.** The product of -3 and a number s A number v divided by 12 The sum of 4 and a number f	**Simplify each expression** (-304) (15) 2 x (8) 6 –(-3)	**Evaluate each expression for the given values.** 3 (c) for c = -3.5 (f x g) for f = and g = 7

Additional Book List

Entering Grade 6 and 7 choose TWO books from the list from DIFFERENT genres.
Entering Grade 8 choose THREE books from this list from three DIFFERENT genres.

GENRE	Book Choices	Book Choices	Book Choices	Book Choices	Book Choices
Fiction	**The Whitee** *St. John*	**Drums, Girls and Dangerous Pie-** *Sonnenblick*	**Walk Two Moons** *Creech*	**The Maze Runner** *Dashner*	**The Graveyard Book** *Gaiman*
Sci Fi/Fantasy	**The Giver** *Lowry*	**Where the Mountain Meets the Moon** *Lin*	**The Dark is Rising Series** *Cooper*	**The City of Ember** *DuPrau*	**When You Reach Me** *Stead*
Bio/AutoBio	**Hidden Figures: Young Readers Edition** **Lee, Shutterly**	**Red Scarf Girl: A Memoir of the Cultural Revolution** *Jiang*	**FREE CHOICE:** Must be grade level and appropriate for school!!!	**Twelve Rounds to Glory: The Story of Muhammad Ali** *Smith*	**Dreams from My Father** *Obama*
Historical	**The Witch of Blackbird Pond** *Speare*	**The Shakespeare Stealer** Blackwood	**Bud, Not Buddy** *Paul Curtis*	**Inside Out and Back Again** *Lai*	**Crispin: The Cross of Lead** *Avi*
Mystery/Adventure	**Call of the Wild: The Graphic Novel** London	**Alex Rider Series** *Horowitz*	**FREE CHOICE:** Must be grade level and appropriate for school!!!	**Liar, Liar** *Paulson*	**Ender's Game** *Scott Card*

EVEN MORE BOOKS! Find your FREE CHOICE HERE!

Title and Author	Description Adapted from BookSource.com	Helpful Information
Number the Stars by Louis Lowry	In 1943, during the German occupation of Denmark, ten-year-old Annemarie learns how to be brave and courageous when she helps shelter her Jewish friend from the Nazis.	**Lexile: 670L**
The Penderwicks by Jeanne Birsall	The four sisters of this nostalgic novel delight in a summer of adventure and discovery at a beautiful Massachusetts estate named Arundel. Jeffrey, the son of Arundel's owner, becomes the perfect companion to their exploits.	**Lexile: 800L**
Pax by Sara Pennypacker	Pax and Peter have been inseparable ever since Peter rescued him as a kit. But one day, the unimaginable happens: Peter's dad enlists in the military and makes him return the fox to the wild. At his grandfather's house, three hundred miles away from home, Peter knows he isn't where he should be-with Pax. He strikes out on his own despite the encroaching war to be reunited with his fox.	**Lexile: 760L**
Me Frida and the Secret of the Peacock Ring by Angela Cervantes	A room locked for fifty years. A valuable peacock ring. A mysterious brother-sister duo. Paloma Marquez is traveling to Mexico City, birthplace of her deceased father, for the very first time. She's hoping that spending time in Mexico will help her unlock memories of the too-brief time they spent together. While in Mexico, Paloma meets Lizzie and Gael, who present her with an irresistible challenge: The siblings want her to help them find a valuable ring that once belonged to beloved Mexican artist Frida Kahlo.	**Lexile: 710L**
The View from Saturday by E.L. Konigsburg	Four students, with their own individual stories, develop a special bond and attract the attention of their teacher, a paraplegic, who chooses them to represent their sixth-grade class in the Academic Bowl competition.	**Lexile:870L**
The Magician's Elephant by Kate DiCamillo	When a fortune teller's tent appears in the market square of the city of Baltese, orphan Peter Augustus Duchene knows the questions that he needs to ask: Does his sister still live? And if so, how can he find her? The fortuneteller's mysterious answer (an elephant! An elephant will lead him	**Lexile: 730L**

	there!) sets off a chain of events so remarkable, so impossible, that you will hardly dare to believe its true.	
Tuck Everlasting by Natalie Babbit	The Tuck family is confronted with an agonizing situation when they discover that a 10-year-old girl and a malicious stranger now share their secret about a spring whose water prevents one from ever growing any older.	**Lexile: 770L**
The Wild Robot by Peter Brown	When robot Roz opens her eyes for the first time, she discovers that she is alone on a remote, wild island. Why is she there? Where did she come from? And, most important, how will she survive in her harsh surroundings? Roz's only hope is to learn from the island's hostile animal inhabitants. When she tries to care for an orphaned gosling, the other animals finally decide to help, and the island starts to feel like home.	**Lexile: 740L**
The Higher Power of Lucky by Susan Patron	Fearing that her legal guardian plans to abandon her to return to France, ten-year-old aspiring scientist Lucky Trimble determines to run away, while also continuing to seek the Higher Power that will bring stability to her life.	**Lexile: 950L**
The Mighty Miss Malone by Christopher Paul Curtis	Academically gifted Deza Malone and her family embark on a journey to find her job-seeking father when he goes missing and end up in a shanty town in Flint, Michigan.	**Lexile: 750L**
Sadako And The Thousand Paper Cranes by Eleanor Coerr	Based on a true story, Hiroshima-born Sadako is told that she has the "atom bomb disease," leukemia; thus she turns to her native beliefs by making a thousand paper cranes so the gods will grant her one wish to be well again.	**Guided Reading: R Lexile: 690L**
A Long Walk to Water by Linda Sue Park	A Long Walk to Water begins as two stories, told in alternating sections, about a girl in Sudan in 2008 and a boy in Sudan in 1985. The girl, Nya, is fetching water from a pond that is two hours' walk from her home: she makes two trips to the pond every day. The boy, Salva, becomes one of the "lost boys" of Sudan, refugees who cover the African continent on foot as they search for their families and for a safe place to stay. Enduring every hardship from loneliness to attack by armed rebels to contact with killer lions and crocodiles, Salva is a survivor, and his story goes on to intersect with Nya's in an astonishing and moving way.	**Guided Reading: W Lexile: 720L**
Volcano Rising by Elizabeth Rusch	Simple science text geared toward young children introduces the parts of a volcano and explains the ways in which volcanoes create new land, mountains, and islands where none existed before. An informational second	**Nonfiction Lexile: 1090L**

	layer provides specific examples, featuring volcanoes found in the United States and other parts of the world.	
The Boy Who Harnessed the Wind: Young Readers Edition by William Kamkwamba	When a terrible drought struck William Kamkwamba's tiny village in Malawi, his family lost all of the season's crops, leaving them with nothing to eat and nothing to sell. William began to explore science books in his village library, looking for a solution and came up with the idea that would change his family's life forever: he could build a windmill. Made out of scrap metal and old bicycle parts, William's windmill brought electricity to his home and helped his family pump the water they needed to farm the land.	**Nonfiction Lexile: 860L**
We Are the Ship: The Story of Negro League Baseball Nelson Kadir	Rich illustrations capture the excitement and thrills of the glory years of Negro League baseball in the early 1900s, profiling its star athletes, highlighting the challenges faced by the players, and the sacrifices made to live out their dreams and play the game they loved.	**Nonfiction Lexile: 900L**
Hidden Figures: Young Reader's Edition Margot Lee Shetterly	This book brings to life the stories of Dorothy Vaughan, Mary Jackson, Katherine Johnson, and Christine Darden, four African-American women who lived through the Civil Rights era, the Space Race, the Cold War, and the movement for gender equality, and whose work forever changed the face of NASA and the country.	**Nonfiction Lexile: 1120L**

Books focusing on building Identity

- 6-8 book ideas: A few options that are MG focused around identity and community...
    - *Harbor Me* by Jacqueline Woodson
    https://www.penguinrandomhouse.com/books/304852/harbor-me-by-jacqueline-woodson/
    - *The Hero Next Door* (Anthology) edited by Olugbemisola Rhuday-Perkovich
    https://www.goodreads.com/en/book/show/42790794-the-hero-next-door
    - *Flying Lessons and Other Short Stories (Anthology)* edited by Ellen Oh
    https://www.goodreads.com/book/show/24561496-flying-lessons-other-stories
    - *Look Both Ways: A Tale Told in Ten Blocks* by Jason Reynolds
    https://www.goodreads.com/book/show/45493566-look-both-ways
    - *Count Me In* by Varsha Bajaj https://www.goodreads.com/book/show/38724576-count-me-in
    - *Posted* by John David Anderson https://www.goodreads.com/book/show/31371228-posted
    - *Ancestor Approved: Intertribal Stories for Kids* (Anthology) edited by Cynthia Leitich Smith
    https://www.goodreads.com/book/show/53402104-ancestor-approved
    - *Becoming: Adapted for Young Readers* by Michelle Obama
    https://www.goodreads.com/book/show/56786139-becoming