

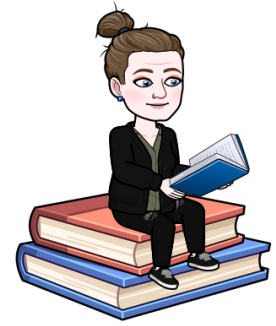
Grade 8 Supply List

1. 1 Heavy Duty Round-Ring 2" View Binder
2. 1 Package Filler Paper, College Ruled
3. 1 Spiral Notebook, Wide Ruled
4. 1 Composition Notebook (for ELA - Grammar Lessons)
5. 2 pkg of binder dividers (multiple colors)
6. 1 pencil pouch with mesh window
7. 4 boxes of #2 Pencils
8. 2 jumbo erasers
9. 1 pkg. blue ballpoint pens
10. 1 pkg. red or colored ballpoint pens
11. 1 pkg of highlighters (multiple colors)
12. 2 rolls of 2-Ply Paper Towels
13. 3 boxes of 2-Ply Facial Tissue.
14. 1 container of Disinfectant Wipes
15. 2 iPad chargers (one for home and one for school)
16. Headphones

8TH GRADE Summer READING PACKET

“Why Summer Reading Pays Off Year-Round”

Posted to Homeroom, the official Blog of the US Department of Education



Attention parents & guardians: [You can] help your child become a better reader before the new school year begins. Summer is an important time for students to keep reading and improve their language skills. If your child [does not read] regularly this summer, they may be in danger of the “summer slide”—a decline in their reading ability.



Numerous studies indicate that students who don't read or read infrequently during their summer vacation see their reading abilities stagnate or decline. This effect becomes more pronounced as students get older and advance through the school system. The situation for economically disadvantaged students is especially grim: if students from low-income families don't read over the summer, they are much more likely to fall behind their more privileged peers, widening the “achievement gap.”

“It's like if you play an instrument but put it down for three months,” said Laurie Calvert, a teacher who is working as the Director of Teacher Outreach at ED. She wrote an academic thesis on improving summer reading programs at her North Carolina high school. “You're not going to be as good as a person who continues to play the instrument over those three months.”

However, this “summer slide” can be avoided by ensuring that children are as engaged as possible in whatever they choose to read—**just as long as they're reading every day.**

“Anything that keeps students reading works,” Calvert said. “The more engaged you are in the text, the closer you're going to read it. The closer you read it, the more you comprehend. And that process grows your skill.”

The best ways to keep your child from becoming a “rusty reader” over the summer are:

1. Encourage your children to read books they enjoy for at least 30 minutes per day. Your child will likely be more engrossed in material they choose themselves than material that is forced on them.
2. Provide incentives for reluctant readers. For example, if your child enjoys basketball, agree to take them to the local court if they do their “daily reading.”
3. Make reading a social act. Establish a time during the day when all members of the family gather and read on their own, or take turns reading the same book aloud.
4. Use apps and websites! Newsela.com, Overdrive, and TedEd are great resources for engaging young readers :)

8TH GRADE Summer READING Assignment



Assignment: Utopia Choice Book

For the upcoming school year, you will read **ONE** utopian novel over the summer. A utopian novel is a novel that is set in the “perfect” society. We will be using texts for discussions and assignments in September. If you decide to read the books in June, you may need to review them again. “I forget what happened” will not be accepted. *Any work not completed will result in recurring after school detentions until completion.*

Steps for success:

1. Choose **ONE** of the books described in the charts on the following pages of the packets. You can find copies of the books at your local library, in Ms. Grabowski’s library, online, or in a bookstore. If you prefer to read a book not listed, please email Ms. Grabowski for approval of the book by **July 25th**.
2. Read your chosen novel. Please read the book carefully! I highly suggest taking notes on details or highlighting important information.
3. As you read, fill out ONE graphic organizer square every 25 pages, as instructed, located on the final pages of this packet. Choose either square A, B, C, or D as you see best fit.

If you have any questions as you are reading (about the novel, assignment, or your notes), please email Ms. Grabowski at mgrabowski@town.hull.ma.us!

BOOK OPTIONS (CHOOSE 1)

TITLE	AUTHOR	DESCRIPTION
<i>The Ear, the Eye, and the Arm</i>	Nancy Farmer	The year is 2194, and Tendai, Rita, and Kuda are the children of Zimbabwe's wealthy and powerful chief of security. They've escaped from their father's estate to explore the dangerous city of Harare--and promptly disappear. Their parents call in the Ear, the Eye, and the Arm, detectives whose exposure to nuclear waste has given them special powers. Together they must save the children from the evils of the past, the technology of the future, and criminals with plans much more sinister than anyone could have imagined.
<i>The Limit</i>	Kristen Landon	In a world not too far removed from our own, kids are being taken away to special workhouses if their families exceed the monthly debt limit imposed by the government. Thirteen-year-old Matt briefly wonders if he might be next, but quickly dismisses the thought. After all, his parents are financially responsible, unlike the parents of those other kids. As long as his parents remain within their limit, the government will be satisfied and leave them alone. But all it takes is one fatal visit to the store to push Matt's family over their limit, and to change his life forever.
<i>The City of Ember</i> (Books of Ember Series)	Jeanne DuPrau	The city of Ember was built as a last refuge for the human race. Two hundred years later, the great lamps that light the city are beginning to flicker. When Lina finds part of an ancient message, she's sure it holds a secret that will save the city. She and her friend Doon must decipher the message before the lights go out on Ember forever!
<i>The Hunger Games</i> (The Hunger Games Series)	Suzanne Collins	In the ruins of a place once known as North America lies the nation of Panem, a shining Capitol surrounded by twelve outlying districts. The Capitol is harsh and cruel and keeps the districts in line by forcing them all to send one boy and one girl between the ages of twelve and eighteen to participate in the annual Hunger Games, a fight to the death on live TV.
<i>Divergent</i> (Divergent Series)	Veronica Roth	In Beatrice Prior's dystopian Chicago world, society is divided into five factions, each dedicated to the cultivation of a particular virtue: Candor (the honest), Abnegation (the selfless), Dauntless (the brave), Amity (the peaceful), and Erudite (the intelligent). On an appointed day of every year, all sixteen-year-olds must select the faction to which they will devote the rest of their lives. For Beatrice, the decision is between staying with her family and being who she really is; she can't have both. So she makes a choice that surprises everyone, including herself.
<i>Fahrenheit 451</i>	Ray Bradbury	Nowadays firemen start fires. Fireman Guy Montag loves to rush to a fire and watch books burn up. The system was simple. Everyone understood it. Books were burning, along with the houses in which they were hidden. Then he met a seventeen-year old girl who told him of a past when people were not afraid, and a professor who told him of a future in which people could think, and Guy Montag suddenly realized what he had to do!

<i>Among the Hidden</i> (Shadow Children Series)	Margaret Peterson	<p>Luke has never been to school. He's never had a birthday party, or gone to a friend's house for an overnight. In fact, Luke has never had a friend.</p> <p>Luke is one of the shadow children, a third child forbidden by the Population Police. He's lived his entire life in hiding, and now, with a new housing development replacing the woods next to his family's farm, he is no longer even allowed to go outside. Then, one day Luke sees a girl's face in the window of a house where he knows two other children already live. Finally, he meets a shadow child like himself. Jen is willing to risk everything to come out of the shadows. Does Luke dare to become involved in her dangerous plan? Can he afford not to?</p>
<i>Uglies</i> (Uglies Series)	Scott Westerfield	<p>Everybody gets to be supermodel gorgeous. What could be wrong with that? Tally Youngblood is about to turn sixteen, and she can't wait. Not for her driver's license; rather, for turning pretty. In Tally's world, your sixteenth birthday brings an operation that turns you from a repellent ugly into a stunningly attractive pretty and catapults you into a high-tech paradise where your only job is to have a really great time. In just a few weeks Tally will be there.</p> <p>Anticipating this happy transformation, Tally meets Shay, another female ugly, who shares her enjoyment of hoverboarding and risky pranks. But Shay also disdains the false values and programmed conformity of the society. She'd rather risk life on the outside and urges Tally to defect with her. When Shay runs away, Tally learns about a whole new side of the pretty world, and it isn't very pretty. The authorities offer Tally the worst choice she can imagine: Find her friend and turn her in, or never turn pretty at all. The choice Tally makes changes her world forever.</p>
<i>The Maze Runner</i> (Maze Runner Series)	James Dashner	<p>Thomas awakens alone and confused in an elevator. He can't remember how he got there. He doesn't know anything about himself...except his name. When he gets out of the elevator, he finds other boys, 60 of them. All are trapped in the Glade, a small patch of land surrounded on all sides by a brick wall. Between the food they've learned how to grow and the supplies that are sent to them, they do well. But why are they here? And will they ever figure out how to navigate the maze that keeps them locked inside the Glade? Soon, a girl arrives with a mysterious message and everything begins to change. Thomas knows that he could lead everyone out through the maze...if only he could tap into his dark memories. Mysterious and creepy, action-packed and suspenseful, you'll get so into this book you might not be able to get out!</p>

***Note: Although you are only required to read one title from this list, please feel free to read more than one from this list if you're interested! Several of these titles are openers to a series. I encourage you to continue the series if you enjoyed it!**

Name: _____

Date: _____

SUMMER READING LOG GRAPHIC ORGANIZER

Directions: Complete ONE graphic organizer square **every 25 pages of the book** you have chosen from the list according to the prompts in the template. Choose either square A, B, C, or D as you see best fit. You do NOT need to complete all 4 squares for each section!

Book Title: _____ Author: _____ Pages: _____

A. Summary and Prediction	C. Personal Response
<p>1. Write a summary of the assigned reading. <u>Your summary must:</u></p> <ul style="list-style-type: none"> - Describe 3 key events in the story using transition words (Example: first, next, then, finally) - Be a minimum of 4 sentences <p>2. Make a prediction about what will happen. <u>Your prediction must:</u></p> <ul style="list-style-type: none"> - Be linked to the events described in your summary - Be a minimum of 2 sentences 	<p>1. Write a personal response to the assigned reading. <u>Your response must:</u></p> <ul style="list-style-type: none"> - Honestly describe and explain your thoughts and feelings as you read the chapter. What were you thinking? - Be a minimum of 5 sentences. <p>If you are having trouble starting, you can choose from the list of response starters below. <i>Do not feel restricted by this list.</i></p> <ul style="list-style-type: none"> - When I read this chapter I felt... - I can relate to... - I am confused about... - This reminds me of... - I want to ask the author/character...
B. Important Passage	D. Questions
<p>1. Record ONE passage from the chapter that stands out to you as an important moment. <u>The passage must:</u></p> <ul style="list-style-type: none"> - Be in MLA format "This is a quote" (Breen 3-7) - Be a minimum of 2 sentences <p>2. Explain why you chose the passage <u>The explanation must:</u></p> <ul style="list-style-type: none"> - Be at minimum of 2 sentences <p>Think: Why is this passage important? How does it contribute to the novel?</p>	<p>1. Record two questions you have as you read. <u>Your questions must:</u></p> <ul style="list-style-type: none"> - Include one comprehension question (who, what, when, where) - Include one analytical question (why, how) - Be properly punctuated and use correct grammar - Be numbered 1-2

Name: _____

SUMMER READING LOG GRAPHIC ORGANIZER

Directions: Complete ONE prompt **every 25 pages of the book** you have chosen from the list according to the prompts in the template. Choose either prompt A, B, C, or D as you see best fit. You do NOT need to complete all 4 prompts for each section!

Book Title: _____ Author: _____ Pages: _____

I am doing _____ for these 25 pages (choose one of the options below).

- A. Summary and Prediction
- B. Important Passage
- C. Personal Response
- D. Questions

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

You should reproduce this worksheet on a white lined piece of paper or print multiple copies of this page. You should have one prompt response **for every 25 pages of your chosen novel.*

SUMMER READING CHECKLIST:

☐ 1.) Choose a utopia book. The book I chose is:

_____ by _____

☐ 2.) Complete a reading prompt for every 25 pages for your chosen book. (You may wish to add additional checkboxes here if your book is longer than this!)

☐ Pages 1-25

☐ Pages 26-51

☐ Pages 52-77

☐ Pages 78-103

☐ Pages 104-128

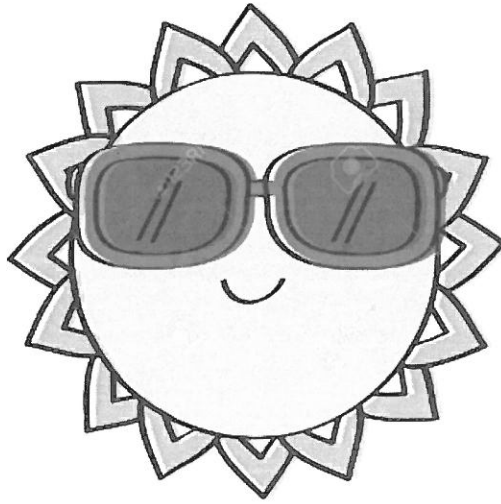
☐ Pages 129-154

☐ Pages 155-180

☐ Pages 181-206

☐ Pages 207-232

☐ 3.) Bring ALL of your work to school on the first day!



Summer Math Packet

Students entering 8th grade

Fall of 2022

Name: _____

Date Completed: _____

Hello! I hope you enjoy your summer, but it is good to work throughout the summer to keep your skills sharp. This packet may seem long, but most of the problems should be quick to solve and there are some diagrams that take up space. Please do not use a calculator and I look forward to seeing you in the fall.

Sincerely,

Mrs. Cocchi

MMS Math Department

jcocchi@town.hull.ma.us

addition

~ **Same Signs** ~
Add & KEEP the sign!

$$2 + 2 = 4$$

$$-6 + (-4) = -10$$

~ **Different Signs** ~
SUBTRACT & take the sign
of the HIGHER absolute
value!

$$-18 + 14 = -4$$

$$-10 + 40 = 30$$

subtraction

KEEP... The first number the same.

$$4 - 6$$

CHANGE... The subtraction to
addition.

$$4 + 6$$

CHANGE... The sign of the second
number.

$$4 + -6$$

Then follow the rules for addition!



integer operations

Multiply or Divide like normal.

~ **Same Signs: POSITIVE ANSWER** ~

$$6(8) = 48$$

$$-7 \cdot -4 = 28$$

~ **Different Signs: NEGATIVE ANSWER** ~

$$-4(5) = -20$$

$$56/-8 = -7$$

+	-	-
-	+	-
-	-	+

multiplication & division

Integer Operations Review

Name: _____

Adding Integers

1) $85 + (-96) =$ _____

2) $80 + 57 =$ _____

3) $86 + (-38) =$ _____

4) $22 + (-41) =$ _____

5) $-18 + (-45) =$ _____

6) $-32 + 48 =$ _____

7) $6 + (-33) =$ _____

8) $6 + (-47) =$ _____

9) $(-78) + 69 =$ _____

10) $-72 + (-30) + 10 =$ _____

11) $-83 + (-36) + 20 =$ _____

Subtracting Integers

1) $1 - 3 =$ _____

2) $2 - (-5) =$ _____

3) $6 - (-9) =$ _____

4) $-7 - (-1) =$ _____

5) $-7 - 4 =$ _____

6) $3 - (-2) =$ _____

7) $-1 - 9 =$ _____

8) $2 - 9 =$ _____

9) $-8 - (-1) =$ _____

Multiplying Integers

1) $(-4)(-12) =$ _____

2) $-8 \times (-8) =$ _____

3) $(-8)(-10) =$ _____

4) $5 \times 1 =$ _____

5) $(-10)(11) =$ _____

6) $(-3)(-8) =$ _____

7) $-2 \times 6 =$ _____

8) $7(-12) =$ _____

9) $4 \times (-10) =$ _____

10) $(-9)(-6)(2) =$ _____

11) $(-10)(-7)(-4) =$ _____

Dividing Integers

1) $-48 \div 6 =$ _____

2) $-81 \div (-9) =$ _____

3) $-18 \div (-6) =$ _____

4) $25 \div (-5) =$ _____

5) $-10 \div 2 =$ _____

6) $-35 \div (-5) =$ _____

7) $-42 \div 6 =$ _____

8) $-70 \div (-7) =$ _____

9) $-16 \div (-8) =$ _____

Rules for the Order of Operations

Please Excuse My Dear Aunt Sally

Parenthesis- Do any operations in parenthesis

Exponents- Do any exponents

Multiplication
Division



Do all multiplication and division in order from left to right

Addition
Subtraction



Do all addition and subtraction in order from left to right

Example:

$$12 + 4 \times (11 - 6)$$


$$12 + 4 \times 5$$


$$12 + 20 = 32$$

**Remember to only do one step at a time! ☺*

Name : _____

Order of Operations: Basic

L3ES1

Solve.

1) $6 + 42 \div 2 - 15$

Ans =

2) $36 - 10 \times 2 \div 5 - 11$

Ans =

3) $25 \times 2 - 42 \div 6 + 18$

Ans =

4) $3 + 32 \div 8 - 9$

Ans =

5) $8 + 9 - 2 \times 3$

Ans =

6) $4 - 6 \times 2 \div 2 + 2$

Ans =

7) $12 \div 2 \times 6 + 4 - 3$

Ans =

8) $63 \div 7 \times 3 - 4$

Ans =

9) $4 + 8 - 5 \times 6$

Ans =

10) $5 + 36 \div 2 \times 3 - 4$

Ans =

5 simple rules for simplifying fractions:

- #1—check to see if the numerator fits evenly into the denominator. If so, divide by the numerator.
- #2—check to see if both the numerator and denominator are even. If so, divide by 2. *(This helps cover 2's, 4's, 6's, and 8's.)*
- #3—check to see if both the numerator and denominator are multiples of 3. If so, divide by 3. *(This helps cover 3's, 6's, and 9's.)*
- #4—check to see if both the numerator and the denominator are multiples of 5. If so, divide by 5. *(This helps cover 5's and 10's.)*
- #5—check to see if the numerator and denominator are any other obvious multiples of basic prime numbers, like 7, 11, or 13. *(This gets most of the others)*

Recheck each of these rules after each step of simplifying to make sure you are in SIMPLEST form. Also remember, that if you get the numerator to 1, you are done!

The 5 rules in simplest form are: $\div N \div 2 \div 3 \div 5 \div \text{Primes}$

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- #1—check to see if the numerator fits evenly into the denominator. If so, divide by the numerator.
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- #4—check to see if both the numerator and the denominator are multiples of 5. If so, divide by 5. *(This helps cover 5's and 10's.)*
- #5—check to see if the numerator and denominator are any other obvious multiples of basic prime numbers, like 7, 11, or 13. *(This gets most of the others)*

Recheck each of these rules after each step of simplifying to make sure you are in SIMPLEST form. Also remember, that if you get the numerator to 1, you are done!

The 5 rules in simplest form are: $\div N \div 2 \div 3 \div 5 \div \text{Primes}$

Name : _____

Simplifying Proper Fractions

Sheet 1

A) Reduce each proper fraction to its lowest terms.

1) $\frac{3}{6} =$

2) $\frac{32}{56} =$

3) $\frac{30}{48} =$

4) $\frac{9}{81} =$

5) $\frac{6}{22} =$

6) $\frac{4}{8} =$

7) $\frac{5}{35} =$

8) $\frac{27}{51} =$

B) 1) Which of the following fractions is the simplest form of $\frac{7}{14}$?

a) $\frac{1}{2}$

b) $\frac{2}{3}$

c) $\frac{5}{6}$

d) $\frac{1}{7}$

2) Which of the following fractions is the simplest form of $\frac{18}{40}$?

a) $\frac{9}{10}$

b) $\frac{6}{20}$

c) $\frac{9}{20}$

d) $\frac{6}{15}$

Decimal Place Value Chart



Hundred Thousands	HTH	100,000	Ten Thousands	TTh	10,000	Thousands	Th	1,000	Hundreds	H	100	Tens	T	10	Ones	O	.	tenths	t	$\frac{1}{10}$	hundredths	h	$\frac{1}{100}$	thousandths	th	$\frac{1}{1,000}$	ten thousandths	tth	$\frac{1}{10,000}$	hundred thousandths	hth	$\frac{1}{100,000}$
Whole Number Part																Fractional Part												Decimal Point				

Underline the Digit

Up to thousandths: S1

1) Underline the digit in thousandths place.

- a) 756.218 b) 3.672 c) 821.053 d) 46.809

2) Underline the digit in ones place.

- a) 2.70 b) 13.586 c) 562.1 d) 309.14

3) Underline the digit in hundreds place.

- a) 197.8 b) 823.40 c) 261.349 d) 594.1

4) Underline the digit in tenths place.

- a) 423.16 b) 5.2 c) 235.46 d) 86.357

5) Underline the digit in tens place.

- a) 729.85 b) 962.5 c) 80.403 d) 215.69

6) Underline the digit in hundredths place.

- a) 473.529 b) 12.896 c) 3.602 d) 742.93

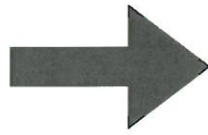
7) Underline the digit in thousandths place.

- a) 387.215 b) 2.674 c) 92.561 d) 54.362

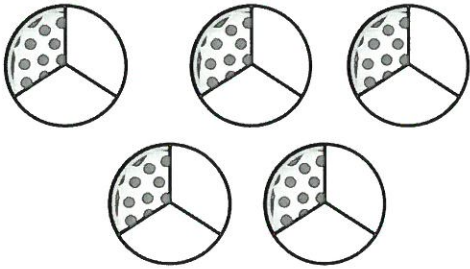
8) Underline the digit in tenths place.

- a) 5.829 b) 67.208 c) 76.943 d) 123.567

IMPROPER FRACTION

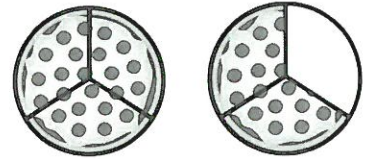


MIXED NUMBER



$$\frac{5}{3}$$

numerator
is larger than the
denominator



$$2\frac{2}{3}$$

whole number
and
fraction

Step 1

Divide the numerator by the denominator

$$\frac{5}{3} = 5 \div 3$$

Step 2

Solve the division problem with a remainder

$$5 \div 3 = 1r2$$

Step 3

Convert the quotient back into a fraction.

$$1r2 = 1 \text{ whole and } 2 \text{ pieces left over} = 1\frac{2}{3}$$

$$\frac{5}{3} = 1\frac{2}{3}$$



*Denominator stays the same!

Name : _____

Converting Improper Fractions to Mixed Numbers

Sheet 1

Convert each improper fraction to a mixed number.

1) $\frac{9}{2} =$ _____

2) $\frac{27}{8} =$ _____

3) $\frac{85}{9} =$ _____

4) $\frac{19}{3} =$ _____

5) $\frac{47}{6} =$ _____

6) $\frac{67}{12} =$ _____

7) $\frac{29}{10} =$ _____

8) $\frac{53}{6} =$ _____

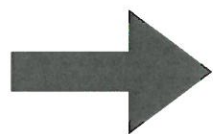
9) $\frac{71}{8} =$ _____

10) $\frac{6}{5} =$ _____

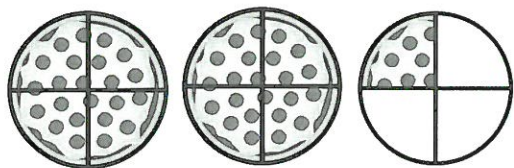
11) $\frac{7}{4} =$ _____

12) $\frac{92}{11} =$ _____

MIXED NUMBER

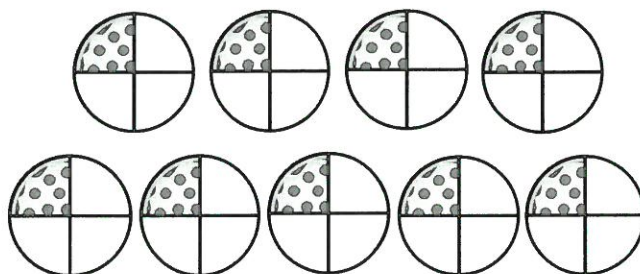


IMPROPER FRACTION



$$2\frac{1}{4}$$

whole number
and
fraction



$$\frac{9}{4}$$

numerator
is larger than the
denominator

Step
1

Multiply the whole number by the denominator

$$2\frac{1}{4}$$



$$4 \times 2 = 8$$

There are 8 fourths in the two whole pizzas.

Step
2

Add the numerator

$$8 \text{ fourths} + 1 \text{ fourth} = 9 \text{ fourths}$$

Step
3

Denominator stays the same

$$2\frac{1}{4} \times 4 = \frac{9}{4}$$

Name : _____

Converting Mixed Numbers to Improper Fractions

Sheet 1

Convert each mixed number to an improper fraction.

1) $5\frac{2}{7} =$ _____

2) $1\frac{3}{4} =$ _____

3) $9\frac{7}{10} =$ _____

4) $7\frac{3}{8} =$ _____

5) $1\frac{4}{5} =$ _____

6) $6\frac{7}{12} =$ _____

7) $4\frac{8}{9} =$ _____

8) $2\frac{1}{2} =$ _____

9) $5\frac{5}{11} =$ _____

10) $3\frac{1}{6} =$ _____

11) $1\frac{1}{7} =$ _____

12) $8\frac{2}{3} =$ _____

* Add the numerators and keep the denominator.
* Then simplify.

Adding Like Fractions

Proper / Improper: S1

1) $\frac{1}{3} + \frac{1}{3} =$

2) $\frac{8}{5} + \frac{9}{5} =$

3) $\frac{4}{26} + \frac{7}{26} =$

4) $\frac{5}{12} + \frac{7}{12} =$

5) $\frac{13}{30} + \frac{17}{30} =$

6) $\frac{5}{2} + \frac{3}{2} =$

7) $\frac{13}{15} + \frac{4}{15} =$

8) $\frac{10}{36} + \frac{17}{36} =$

9) $\frac{3}{4} + \frac{9}{4} =$

10) $\frac{3}{7} + \frac{2}{7} =$

11) $\frac{12}{20} + \frac{11}{20} =$

12) $\frac{15}{14} + \frac{17}{14} =$

13) $\frac{3}{8} + \frac{7}{8} =$

14) $\frac{19}{18} + \frac{12}{18} =$

Find a common denominator, then add
*Then simplify

Adding Proper Fractions

ES1

1) $\frac{3}{8} + \frac{1 \times 2}{4 \times 2} =$ $\frac{5}{8}$
 $\frac{3}{8} + \frac{2}{8} = \frac{5}{8}$

2) $\frac{2}{3} + \frac{8}{9} =$

3) $\frac{5}{6} + \frac{7}{12} =$

4) $\frac{4}{10} + \frac{3}{5} =$

5) $\frac{1}{2} + \frac{3}{4} =$

6) $\frac{2}{3} + \frac{1}{2} =$

7) $\frac{7}{11} + \frac{2}{5} =$

8) $\frac{1}{4} + \frac{4}{7} =$

9) $\frac{2}{3} + \frac{2}{6} =$

10) $\frac{3}{5} + \frac{1}{2} =$

11) $\frac{1}{4} + \frac{11}{12} =$

12) $\frac{3}{4} + \frac{5}{6} =$

13) $\frac{4}{5} + \frac{2}{3} =$

14) $\frac{1}{2} + \frac{3}{8} =$

* Subtract the numerator and keep denominator.
* Then simplify *

Subtracting Proper Fractions

Easy: S1

1) $\frac{10}{12} - \frac{3}{12} =$

$\frac{7}{12}$

2) $\frac{5}{7} - \frac{3}{7} =$

3) $\frac{2}{3} - \frac{1}{3} =$

4) $\frac{3}{4} - \frac{2}{4} =$

5) $\frac{4}{5} - \frac{2}{5} =$

6) $\frac{9}{10} - \frac{3}{10} =$

7) $\frac{7}{8} - \frac{4}{8} =$

8) $\frac{5}{6} - \frac{4}{6} =$

9) $\frac{8}{10} - \frac{1}{10} =$

10) $\frac{11}{12} - \frac{10}{12} =$

11) $\frac{6}{7} - \frac{2}{7} =$

12) $\frac{10}{11} - \frac{4}{11} =$

13) $\frac{7}{9} - \frac{4}{9} =$

14) $\frac{3}{5} - \frac{2}{5} =$

*Convert to improper fraction
 *Then find a common denominator

Subtracting Unlike Fractions

All fractions: S1

$$1) \quad 8\frac{1}{2} - 2\frac{2}{8} = \frac{50}{8} = 6\frac{2}{8} = \boxed{6\frac{1}{4}}$$

Handwritten work for problem 1:

$$\frac{17 \times 4}{2 \times 4} - \frac{18}{8} = \frac{68}{8} - \frac{18}{8} = \frac{50}{8}$$

$$2) \quad \frac{7}{9} - \frac{2}{3} =$$

$$3) \quad \frac{9}{5} - \frac{22}{20} =$$

$$4) \quad 9\frac{4}{7} - \frac{30}{28} =$$

$$5) \quad 5\frac{1}{2} - \frac{4}{10} =$$

$$6) \quad \frac{10}{3} - \frac{2}{5} =$$

$$7) \quad \frac{11}{12} - \frac{5}{6} =$$

$$8) \quad 4\frac{1}{2} - 1\frac{2}{3} =$$

$$9) \quad 7\frac{1}{3} - \frac{40}{39} =$$

$$10) \quad \frac{9}{4} - \frac{20}{16} =$$

$$11) \quad \frac{7}{2} - \frac{4}{5} =$$

$$12) \quad 3\frac{1}{6} - \frac{15}{18} =$$

$$13) \quad 4\frac{3}{4} - 2\frac{6}{12} =$$

$$14) \quad \frac{13}{7} - \frac{12}{14} =$$

Simplify, then multiply straight across

Multiplying Fractions - Cross Cancellation

L1S1

Find the product.

1) $\frac{9}{10} \times \frac{2}{3} = \frac{9 \times 1}{5 \times 3} = \frac{3}{5}$

2) $\frac{12}{8} \times \frac{18}{16}$

3) $\frac{33}{7} \times \frac{14}{21}$

4) $\frac{6}{18} \times \frac{9}{42}$

5) $\frac{22}{15} \times \frac{45}{4}$

6) $\frac{3}{28} \times \frac{35}{6}$

7) $\frac{2}{7} \times \frac{35}{12}$

8) $\frac{16}{15} \times \frac{21}{24}$

multiply by the reciprocal

Dividing Fractions

Sheet 1

Find the quotient.

1) $\frac{6}{7} \div \frac{2}{7}$

$$\frac{6}{7} \cdot \frac{7}{2} = \frac{6 \times 1}{1 \times 2} = \frac{3}{1} = 3$$

2) $\frac{1}{4} \div \frac{19}{12}$

3) $\frac{2}{5} \div \frac{7}{9}$

4) $\frac{5}{3} \div \frac{3}{8}$

5) $\frac{3}{4} \div \frac{9}{8}$

6) $\frac{12}{18} \div \frac{17}{9}$

7) $\frac{11}{10} \div \frac{5}{2}$

8) $\frac{15}{17} \div \frac{5}{3}$