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### "Today's Learners, Tomorrow's leaders"

Summer 2020

Dear Parents/Guardians,

Congratulations on the completion of your child's 6<sup>th</sup> grade year! As your child prepares for the middle school experience, it is important that he/she maintains the skills necessary to be successful in mathematics. The mathematics teachers have prepared a summer packet for students to complete. This will enhance and strengthen their skills.

This packet is located on the Pond Road Middle School website. Please print out the document titled "Incoming 7<sup>th</sup> Grade Math Packet."

This packet will be checked on the first day of school and counted as a homework grade. Please complete the packet in its entirety. Please do not leave any questions blank. All work should be shown for every question and a calculator may be used to check your answers.

The websites listed on the next page will link you to videos made by the mathematics teachers from Pond Road Middle School. They will serve as helpful resources as you work through the packet.

Enjoy your summer break and we look forward to meeting you!

## **Online Information**

The mathematics teachers from Pond Road have made short videos to help our students with their summer packets. The videos show examples of the problems and will be a great resource over the summer. Just type the links into your web browser and enjoy!

http://www.showme.com/PRMS-Math - This is the link to the PRMS "Show Me" site. You will find all our mathematics videos here.

Listed below are the links to specific videos.

Adding and Subtracting Decimals - http://www.showme.com/sh/?h=IYdNTHs

Multiplying Decimals - http://www.showme.com/sh/?h=3DLIJyq

Dividing Decimals - http://www.showme.com/sh/?h=EpWayjg

Adding and Subtracting Mixed Numbers - http://www.showme.com/sh/?h=VqHIlvg

Multiplying and Dividing Mixed Numbers - http://www.showme.com/sh/?h=LysM6IM

Number Sense - http://www.showme.com/sh/?h=OiPlv28

Rounding - https://www.youtube.com/watch?v=fd-E18EqSVk

Ordering - https://www.youtube.com/watch?v=VW6UrPKPInA

Divisibility Rules - http://www.showme.com/sh/?h=8A06BHc

Equations - http://www.showme.com/sh/?h=uAWAxF2

Integers - http://www.showme.com/sh/?h=g6dHohc

Proportions - http://www.showme.com/sh/?h=0QzcOHY

Inequalities - http://www.showme.com/sh/?h=InY0dRQ

The following websites may be used for additional reinforcement and review.

www.khanacademy.org www.coolmath.com www.aaamath.com www.funbrain.com www.mathleague.com www.mathplayground.com www.mathantics.com

# **Incoming 7<sup>th</sup> Grade Math Packet**

### **COMPLETE EACH PROBLEM AND SHOW ALL OF YOUR WORK.** WRITE YOUR ANSWERS ON THE LINES AT THE RIGHT.

# PART 1 – DECIMALS

Adding and Subtracting Decimals	*** <u>http://www.sł</u>	lowme.com/sh/?h=1YdNTHs					
Find each sum or difference.	Find each sum or difference.						
1) 46.2 – 34.09	2) 9.06 – 7.2	1					
		2					
3) 8.037 + 7 + 12.4	4) 15.65 – 8.7	3					
		4					

Multiplying Decimals	*** http://www.showme.com/sh/?h=	<u>=3DLlJyq</u>
Find each product.		
5) 1.42 • 7.2	6) (5.03) (2.8)	5
		6
7) (0.006) (3.75)	8) $(3.2)^2$	7

8.\_\_\_\_\_

<b>Dividing Decimals</b>	*** http://www.showme.com/sh/?h=	EpWayjg
Find each quotient.		
9) 346.8 ÷ 5.1	10) $0.32\overline{)3968}$	9
		10
		10
11) 2014 - 0.14	12) 00 + 0.00	
11) $2814 \div 0.14$	12) 99÷0.09	11
		11
		12

# PART 2 – FRACTIONS

Adding and Subtracting Mixed Numbers

\*\*\* http://www.showme.com/sh/?h=VqHIIvg

Find each sum or difference. Simply your answer if possible.

13) 
$$2\frac{2}{5} + 3\frac{4}{9}$$
 14)  $7\frac{3}{4} + 11\frac{2}{3}$ 

13.				

14.\_\_\_\_\_

15) $14\frac{8}{9} - 5\frac{1}{2}$	16) $23\frac{1}{4}$ –	$7\frac{4}{5}$ 15
		16
Multiplying and Dividing N	Mixed Numbers	*** http://www.showme.com/sh/?h=LysM6IM
Find each product or quoti	ent. Simply your ans	swer if possible.
17) $5 \cdot 1\frac{1}{7}$	18) $3\frac{3}{5} \cdot 2\frac{1}{12}$	17
		18
19) $5\frac{5}{8} \div 5$	20) $8\frac{1}{3} \div 4\frac{4}{5}$	19
		20

# PART 3 – NUMBER SENSE

### Complete each problem and show all work.

\*\*\* http://www.showme.com/sh/?h=OiPlv28

21) Write the *prime factorization* of 144.

22) Find the *Greatest Common Factor (GCF)* of 12 and 18.

23) Find the *Least Common Multiple (LCM)* of 24 and 36.

### Round the following numbers to the given place specified below.

\*\*\*https://www.youtube.com/watch?v=fd-E18EqSVk

24) Round 8,956.456 to the <i>hundredths place</i> .	24
25) Round 1,456.789 to the <i>tenths place</i> .	25
26) Round 6,543.982 to the <i>ones place</i> .	26
27) Round 4,317.689 to the <i>tens place</i> .	27

\*\*\*<u>https://www.youtube.com/watch?v=VW6UrPKPInA</u>

## 28) Order the following numbers from *least to greatest.* Rewrite the numbers in order.

0.8	0.5	0.85	0.58	0.508	0.805
0.0	0.0	0.00	0.00	0.000	0.000

29) Order the following numbers from *greatest to least.* Rewrite the numbers in order.

-2.3	-2	-1.7	-2.1	-1	-2.9

30) What is the *divisibility rule for 3?* 

What is the *divisibility rule for 4?* 

What is the *divisibility rule for 9?* 

31) Using the above rules, determine if 1,347 is *divisible by 3?* 

Using the above rules, determine if 18,728 is *divisible by 4?* 

Using the above rules, determine if 431,262 is *divisible by 9?* 

# PART 4 – EQUATIONS

Solve the following equations using inverse operations. Show all work.

	Example:	x + 18 = 30	*** http://www.showme.com/sh/?h=uAWAxF2
		<u> </u>	
		x = 12	
32)	9 + x = 12	33) 3 = x	_ 14
52)	<i>y</i> • <b>n</b> • <b>1</b>	<i>55) 5 A</i>	32.
			22
			33
34)	5x = 30	35) $\frac{x}{-1} = 1$	1
)		4	
			34
			35

## PART 5 – INTEGERS

\*\*\* http://www.showme.com/sh/?h=g6dHohc

#### Simplify the following using the order of operations (PEMDAS). Show all work.

37)  $24+3^2-2(6+5)$ 36)  $60 - 20 \div 4 \bullet 5$ 

36.\_\_\_\_\_

37.			

## PART 6 – PROPORTIONS \*\*\* http://www.showme.com/sh/?h=0QzcOHY

#### $\frac{5}{9} = \frac{x}{15}$ 38) Solve the proportion.

#### 39) Use a proportion to solve the following problem.

If Frank can read 12 books in 30 days, how many books can he read in 50 days?

## PART 7 – INEQUALITIES \*\*\* <u>http://www.showme.com/sh/?h=lnY0dRQ</u>

43.

Graph the following inequalities on the number line to the right of each problem.

40) x < 5	<sup>40.</sup> ←		>
41) x $\ge -2$	<sup>41.</sup> ←		>
Solve the following inequalities.	. Show all work.		
42) $4 + x \leq 20$	43) $x - 7 > 22$		
		42	