

2017 Summer Learning Project 8th Grade Math

Dear PJHS Students and Parents,

In preparation for the 2017-2018 school year, each student entering 8th grade math is required to complete a summer learning project. The project focuses on the prerequisite concepts and skills necessary for student success in 8th grade math.

The summer learning project is divided into 5 separate sections. A sample calendar has been provided as a guide to follow this summer to ensure that all sections are completed before the school year begins.

A copy of the assignment can be found at any time this summer on the PJHS webpage if needed.

Students will need to bring the completed assignment with them on the first day of the 2017-2018 school year to turn in for a grade to their math teacher.

If you have any questions during the summer about the project, you can email Mrs. Zerita Thomas.

Her email is:

zjohnson-thomas@palestineschools.org

We wish you and your family a safe, happy, healthy and educational summer!

Thank you for your continued support,

The PJHS Math Department



JUNE

Twenty Seventh

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
28	29	30	31	1	2	3
4	5 Begin "Integers in Context"	6	7	8	9 "Integers in Context" Completed	10
11	12 Begin "Estimating Mixed Number Sums and Differences"	13	14	15	16 "Estimating Mixed Number Sums and Differences" Completed	17
18	19 Begin "Multiplying Decimals"	20	21	22	23 "Multiplying Decimals" Completed	24
25	26 Begin "Percents, Decimals, and Fractions"	27	28	29	30 "Percents, Decimals, and Fractions" Completed	1

JULY

Twenty Seventh

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
25	26	27	28	29	30	1
2	3 Begin "Equations Involving Two Operations"	4	5	6	7 "Equations Involving Two Operations" Completed	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29



Comparing Fractions



The city of Madrid experienced a 23-hour-long traffic jam. Why were the police so excited that they took time off from work?

- Read each statement. If the statement is incorrect, cross out that letter. The letters that are left will give the answer.

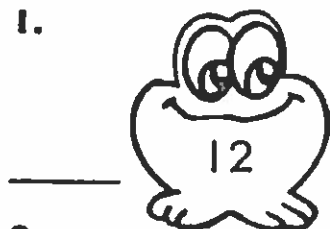
$\frac{3}{4} < \frac{4}{5}$ S	$\frac{5}{12} < \frac{7}{18}$ E	$\frac{6}{7} < \frac{7}{6}$ P	$\frac{1}{4} > \frac{3}{12}$ L	$\frac{5}{6} > \frac{4}{5}$ A	$3\frac{5}{8} < \frac{30}{8}$ I	$\frac{2}{10} > \frac{1}{11}$ N
$\frac{4}{12} < \frac{3}{10}$ B	$14\frac{1}{2} < \frac{33}{2}$ W	$\frac{5}{8} < \frac{6}{10}$ A	$\frac{8}{10} < \frac{7}{9}$ C	$\frac{5}{3} > \frac{3}{2}$ O	$\frac{6}{3} < 3\frac{1}{2}$ N	$\frac{2}{3} < \frac{13}{20}$ K
$\frac{8}{9} > \frac{17}{21}$ T	$\frac{1}{2} < \frac{1}{4}$ D	$\frac{3}{5} > \frac{8}{13}$ F	$\frac{17}{40} > \frac{2}{5}$ H	$5\frac{1}{3} < \frac{14}{3}$ I	$2\frac{1}{4} < \frac{5}{2}$ E	$\frac{5}{7} < \frac{5}{8}$ J
$\frac{11}{24} > \frac{18}{42}$ W	$\frac{1}{5} > \frac{5}{20}$ G	$\frac{4}{7} < \frac{15}{21}$ O	$\frac{16}{3} < \frac{34}{6}$ R	$\frac{9}{20} > \frac{17}{35}$ M	$\frac{6}{33} < \frac{2}{10}$ L	$\frac{5}{18} < \frac{3}{9}$ D
$\frac{7}{32} < \frac{6}{31}$ N	$\frac{12}{21} > \frac{5}{7}$ P	$\frac{10}{60} < \frac{10}{12}$ C	$\frac{6}{15} > \frac{1}{5}$ U	$\frac{16}{20} > 1$ T	$4\frac{1}{3} < \frac{8}{2}$ V	$7\frac{1}{5} > \frac{21}{5}$ P



Estimating Mixed Number Sums and Differences

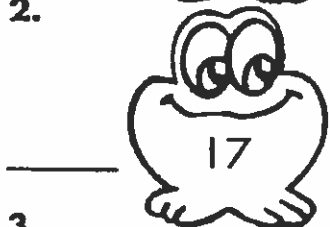
► Each frog represents an estimated sum or difference. Write the letter of the correct lily pad problem next to each frog.

1.



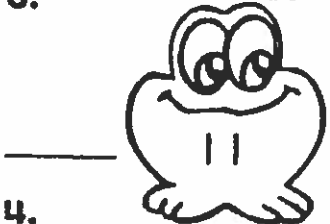
A. $10\frac{8}{11} + 11\frac{5}{11} =$

2.



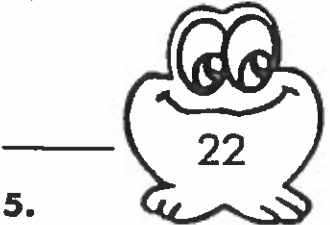
D. $5\frac{2}{3} + 5\frac{7}{10} =$

3.



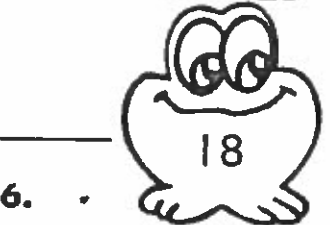
B. $31\frac{4}{9} - 12\frac{5}{6} =$

4.



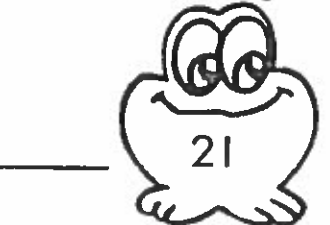
E. $33\frac{5}{12} - 12\frac{3}{7} =$

5.

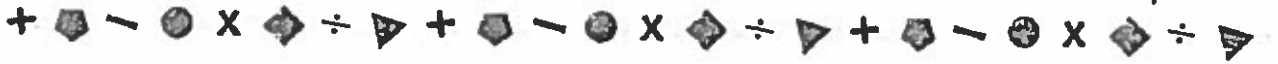


C. $14\frac{2}{5} + 3\frac{3}{8} =$

6.



F. $17\frac{3}{4} - 6\frac{3}{5} =$



Multiplying Decimals

► Multiply.

1.
$$\begin{array}{r} 0.438 \\ \times 0.177 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 0.039 \\ \times 0.009 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 0.246 \\ \times 0.183 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 0.1211 \\ \times 0.344 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 0.4768 \\ \times 0.189 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 0.502 \\ \times 0.176 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 0.0056 \\ \times 0.999 \\ \hline \end{array}$$

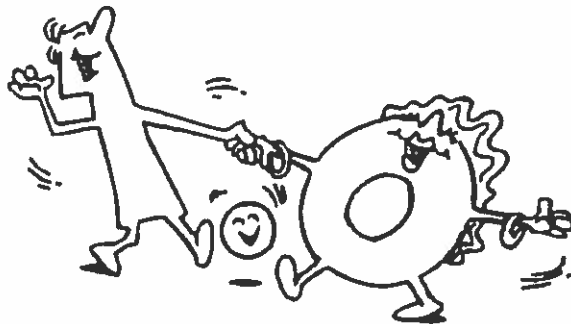
8.
$$\begin{array}{r} 0.317 \\ \times 0.02 \\ \hline \end{array}$$

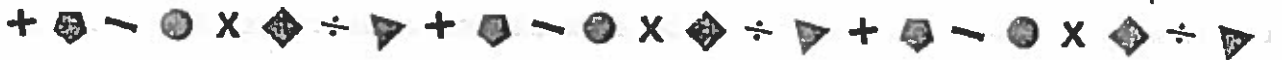
9.
$$\begin{array}{r} 0.4951 \\ \times 0.113 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 0.621 \\ \times 0.118 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 0.088 \\ \times 0.029 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 0.3551 \\ \times 0.208 \\ \hline \end{array}$$





Percents, Decimals, and Fractions

Percent (%) means "per hundred." It is a ratio that compares a number to 100. It is the number of hundredths.

Fraction to Decimal
The fraction bar means divide.

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

$$\begin{array}{r} 0.6 \\ 5 \overline{)3.0} \\ \underline{30} \\ 0 \end{array}$$

Decimal to Fraction
Write the numeral as a fraction and reduce.

$$0.35 = \text{thirty-five hundredths} = \frac{35}{100} = \frac{7}{20}$$

$$0.015 = \text{fifteen thousandths} = \frac{15}{1,000} = \frac{3}{200}$$

Percent to Decimal
Move the decimal two places to the left.

$$\underline{4}2\% = 0.42$$

$$\underline{.1}87\% = 0.0187$$

Decimal to Percent
Move the decimal two places to the right.

$$0.\underline{08} = 8\%$$

$$0.\underline{73} = 73\%$$

► Complete the table.

	Percent	Decimal	Fraction
1.	50%		
2.		0.8	
3.			$\frac{1}{3}$
4.	$16\frac{2}{3}\%$		
5.		0.02	
6.			$\frac{1}{8}$
7.	$2\frac{1}{2}\%$		
8.		0.725	
9.			$\frac{2}{5}$



Equations Involving Two Operations

► Find the solutions to the equations. Show your work.

1. $\frac{x}{5} + 11 = 18$

2. $5r - 140 = -15$

3. $\frac{n}{-7} - 5 = 4$

4. $-29 = 11p + 59$

5. $15 = 120 + 3b$

6. $38 - \frac{a}{11} = 34$

7. $-111 + 2s = 9$

8. $-5 = \frac{c}{8} - 12$

9. $8 - \frac{y}{15} = 12$

10. $86 = -5m + 11$

11. $9 = 21 - \frac{c}{9}$

12. $110 + 2r = 20$

13. $7y + 90 = 6$

14. $20 - 4c = -68$

15. $-29 = \frac{x}{14} - 23$

