2017 Summer Learning Project
7th Grade Pre-AP Math

Dear PJHS Students and Parents,

In preparation for the 2017-2018 school year, each student entering 7th grade Pre-AP Math is required to complete a summer learning project. The project focuses on the prerequisite concepts and skills necessary for student success in 7th grade Pre-AP Math.
The summer learning project is divided into 4 sections, each over different concepts and each with their own due date. All 4 sections are attached to this letter and can also be found on the 7th Grade Pre-AP Math Edmodo class on the student's iPad. The assignment will NOT be turned in through Edmodo. Each student will be responsible for turning in their assignment to Mrs. Hardison on the first day of their 7th grade school year.

The due dates for each section are as follows:

- **Section 1: June 9, 2017 → 18 problems**
- **Section 2: June 16, 2017 → 16 problems**
- **Section 3: June 23, 2017 → 14 problems**
- **Section 4: June 30, 2017 → 12 problems**

Each student can access the assignment through Edmodo. Each student has their own personal login for Edmodo. Once the student is logged into Edmodo, they need to click on the link (JOIN A GROUP). A screen will pop up asking for the (GROUP CODE), and I have the code posted below.

EDMODO CODE: 2i98zu

If you have any additional questions or concerns throughout the summer, please email Neece Hardison.

Mrs. Hardison's Email: shardison@palestineschools.org

We hope to have all of our Pre-AP students this summer successfully complete their math project. Unfortunately, if a student refuses to participate in the project, it may result in removal from the Pre-AP 7th Grade Math program at the start of the 17-18 school year.

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

Thank you for your continued support,

The PJHS Math Department

7th Grade Pre-AP Math Name_____

SUMMER ASSIGNMENT

SECTION I- June 5-9

Evaluate each expression.

1) $-5 \times -1 \div -1 \times -3 - 5$

A) 7 B) 12
C) 10 D) 16

2) $-6 \times 16 \div 4 \times -2 - 6$

A) 37 B) 42
C) 43 D) 46

Find each sum.

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

A) $4\frac{1}{2}$ B) $7\frac{1}{8}$
C) $\frac{3}{14}$ D) $3\frac{1}{2}$

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

A) 6 B) $5\frac{5}{8}$
C) $4\frac{1}{4}$ D) $3\frac{3}{8}$

Find each difference.

5) $\frac{3}{2} - \frac{10}{7}$

A) $\frac{5}{14}$ B) $1\frac{1}{2}$
C) $3\frac{17}{42}$ D) $\frac{1}{14}$

6) $2 - \frac{1}{3}$

A) $1\frac{2}{3}$ B) $5\frac{2}{3}$
C) $2\frac{19}{24}$ D) $2\frac{2}{3}$

Find each product.

7) $5 \times \frac{4}{3}$

A) $12\frac{1}{6}$ B) $6\frac{2}{3}$
C) $5\frac{1}{6}$ D) $7\frac{5}{21}$

8) $5\frac{7}{10} \times 2\frac{1}{2}$

A) $19\frac{13}{14}$ B) $8\frac{1}{5}$
C) $14\frac{1}{4}$ D) $11\frac{7}{20}$

Find each quotient.

9) $3\frac{1}{10} \div 2\frac{1}{10}$

A) 1 B) $1\frac{10}{21}$

C) $1\frac{1}{3}$ D) $5\frac{1}{6}$

10) $\frac{10}{7} \div 1\frac{1}{2}$

A) $\frac{7}{8}$ B) $1\frac{1}{20}$

C) $\frac{20}{21}$ D) $2\frac{1}{7}$

Solve each equation.

11) $-11 + x = -30$

A) $\left\{2\frac{8}{11}\right\}$ B) $\{-41\}$

C) $\{-19\}$ D) $\{330\}$

12) $8 - p = 19$

A) $\{-11\}$ B) $\{27\}$

C) $\left\{2\frac{3}{8}\right\}$ D) $\{11\}$

13) $\frac{n}{2} = -9$

A) $\{-7\}$ B) $\left\{-4\frac{1}{2}\right\}$

C) $\{-11\}$ D) $\{-18\}$

14) $19n = -76$

A) $\{-1444\}$ B) $\{-57\}$

C) $\{-4\}$ D) $\{-95\}$

Solve each proportion.

15) $\frac{2}{4} = \frac{7}{x}$

A) $\{4\}$ B) $\{14\}$

C) $\{7\}$ D) $\{5.4\}$

16) $\frac{3}{v} = \frac{4}{2}$

A) $\{1.5\}$ B) $\{2.32\}$

C) $\{7.464\}$ D) $\{3\}$

17) $\frac{6}{n} = \frac{7}{3}$

A) $\{2.57\}$ B) $\{2.3\}$

C) $\{4\}$ D) $\{6\}$

18) $\frac{x}{3} = \frac{2}{5}$

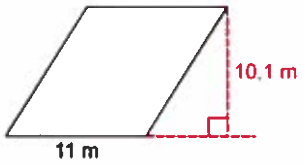
A) $\{1.2\}$ B) $\{4.8\}$

C) $\{6.2\}$ D) $\{1\}$

SECTION II- June 12-16

Find the area of each.

19)

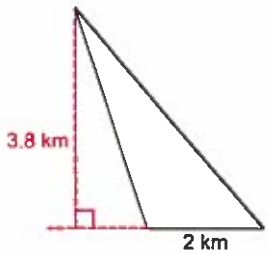


A) 105.8 m² B) 222.2 m²
C) 55.6 m² D) 111.1 m²

20)

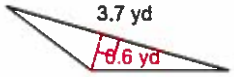
A) 30 km² B) 36.6 km²
C) 60 km² D) 15 km²

21)



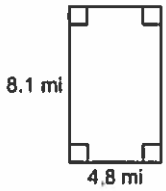
A) 1.9 km² B) 3.8 km²
C) 12.6 km² D) 7.6 km²

22)



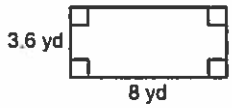
A) 1.11 yd² B) 2.22 yd²
C) 0.6 yd² D) 10.81 yd²

23)



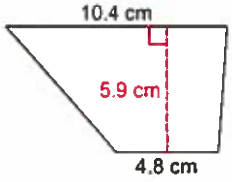
A) 35.58 mi² B) 19.4 mi²
C) 77.76 mi² D) 38.88 mi²

24)



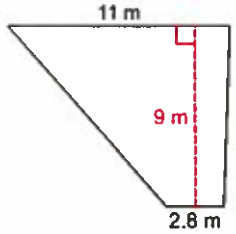
A) 22.2 yd² B) 28.8 yd²
C) 57.6 yd² D) 14.4 yd²

25)



A) 43.64 cm² B) 22.4 cm²
C) 44.84 cm² D) 89.68 cm²

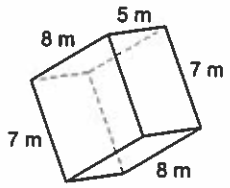
26)



A) 63.9 m² B) 31.1 m²
C) 124.2 m² D) 62.1 m²

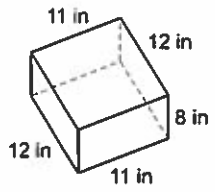
Find the volume of each figure. Round to the nearest tenth.

27)



A) 243.6 m³ B) 121.8 m³
C) 280 m³ D) 216.8 m³

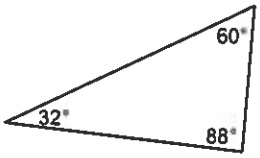
28)



A) 2344.4 in³ B) 2039.6 in³
C) 1172.2 in³ D) 1056 in³

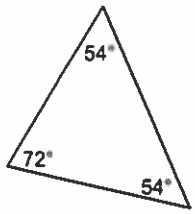
Classify each triangle by its angles and sides.

29)



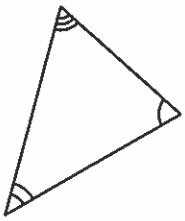
A) obtuse scalene
B) acute scalene
C) equilateral
D) acute isosceles

30)



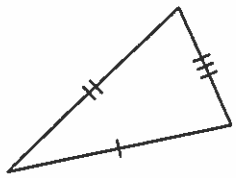
A) equilateral
B) acute isosceles
C) right scalene
D) acute scalene

31)



A) acute isosceles
B) obtuse scalene
C) obtuse isosceles
D) acute scalene

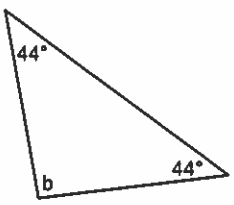
32)



A) right scalene
B) equilateral
C) acute scalene
D) obtuse scalene

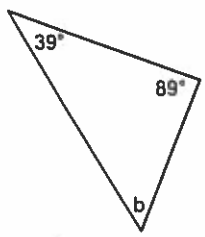
Find the measure of angle b.

33)



A) 92° B) 98°
C) 82° D) 87°

34)



A) 52° B) 61°
C) 55° D) 46°

SECTION III- June 19-23

Write each as a fraction.

35) 25%

A) $\frac{1}{4}$ B) 140

C) $2\frac{1}{2}$ D) 25

36) 60%

A) 6 B) 60

C) $1\frac{2}{3}$ D) $\frac{3}{5}$

Write each as a decimal. Round to the thousandths place.

37) 1%

A) 0.001 B) 110

C) 1 D) 0.01

38) 27%

A) 2.7 B) 5420

C) 27 D) 0.27

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

A) 0.727 B) 0.667

C) 0.007 D) 2.3

40) $\frac{29}{95}$

A) 29.95 B) 0.905

C) 3.053 D) 0.305

Write each as a percent. Round to the nearest tenth of a percent.

41) $\frac{11}{15}$

A) 11.2% B) 0.7%

C) 73.3% D) 7333.3%

42) $\frac{12}{65}$

A) 0.2% B) 108.5%

C) 1846.2% D) 18.5%

Solve each problem.

43) What percent of 103 is 10?

A) 9.7% B) 10.3%

C) 0.1% D) 1030%

44) What percent of 140 is 137?

A) 1.02% B) 0.98%

C) 97.9% D) 102.2%

45) 59% of 156 is what?

A) 92 B) 264.4

C) 9204 D) 5120

46) What is 46% of 35.4?

A) 16.3 B) 1628.4

C) 68.1 D) 6146.5

47) 37 is 73% of what?

A) 27 B) 49.7

C) 2701 D) 50.7

48) 51% of what is 53?

A) 103.5 B) 81.8

C) 103.9 D) 8176

SECTION IV- June 26-30

49) A recipe for cupcakes calls for $\frac{21}{5}$ cups of flour. Pranav accidentally put in $\frac{21}{4}$ cups. How many extra cups did he put in?

A) $\frac{21}{4}$ B) $\frac{4}{5}$

C) $\frac{21}{20}$ D) $\frac{189}{20}$

50) A recipe for muffins calls for $3\frac{4}{5}$ cups of sugar. Sumalee has already put in $2\frac{3}{5}$ cups. How many more cups does she need to put in?

A) $1\frac{1}{5}$ B) $1\frac{6}{13}$

C) 5 D) $6\frac{2}{5}$

51) A hungry elf ate 12 of your muffins. That was $\frac{2}{5}$ of all of them! With how many did you start?

A) 30 B) 37

C) 4.8 D) 32

52) A colony of ants carried away 12 of your muffins. That was $\frac{3}{4}$ of all of them! With how many did you start?

A) 15 B) 9 C) 16 D) 17

53) Amy won 75 lollipops playing hoops at the county fair. At school she gave one to every student in her math class. She only has 53 remaining. How many did she give away?

A) 97 B) 22

C) 23 D) 31

54) Last week Huong ran 20 miles more than Arjun. Huong ran 30 miles. How many miles did Arjun run?

A) 10 B) 50 C) 8 D) 9

55) How many boxes of tissues can you buy with \$28 if one box costs \$4?

A) 7 B) 3 C) 6 D) 4

56) Batteries cost \$6 / pack. How many packs did Matt buy if he spent \$54?

A) 6 B) 9 C) 8 D) 7

57) Last week Ted ran 17.1 miles more than Danielle. Ted ran 23.7 miles. How many miles did Danielle run?

A) 6.6 B) 10.5

C) 40.8 D) 6.2

58) Chelsea was given \$10.78 for washing the dog. She now has \$18.47. How much money did she start with?

A) \$29.25 B) \$7.69

C) \$3.09 D) \$0.71

59) Shanice and her best friend found some money buried in a field. They split the money evenly, each getting \$19.05. How much money did they find?

A) \$35.81 B) \$9.53

C) \$30.80 D) \$38.10

60) Daniel and his best friend found some money buried in a field. They split the money evenly, each getting \$17.82. How much money did they find?

A) \$35.64 B) \$8.91

C) \$33.86 D) \$38.26